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Imagination IN THE PHILOSOPHY OF ARISTOTLE

IF WE WISH to make an exact delineation of the way in which Aristotle speaks about imagination, we must clearly distinguish between the explanation he gives concerning the imagination considered in itself in the *De Anima* on the one hand (and this will be the object of the first part of our study), and, on the other, the allusions he makes regarding the role of the imagination in various human activities or in the vital functions of perfect animals. To insure greater respect for the problem of chronology in Aristotle's writings, in the course of the second part of our study we shall distinguish what he says on this matter in the *De Anima* from what he says in his other treatises.

I. *Analysis of the Third Chapter of the Third Book of the DE ANIMA.*

In the history of philosophy this study of the imagination in the *De Anima* has the unique position of being the first philosophical study on this matter, since, although Plato spoke

about the imagination and sought its precise relations with sensation and opinion, he never dealt with the imagination itself. Independently of its content, which may seem deceptive at first sight, the study which Aristotle makes of it in the *De Anima*, then, has the merit of being the first study.

In approaching this study, we do not find it useless to recall the philosophical perspective in which it is elaborated.¹ In the *De Anima* Aristotle aims for a precise definition of the soul. Hence, after recalling the various opinions of previous philosophers concerning the soul, he begins to tell us, in the Second Book, what it is.

He commences by defining its most common that is,

¹ In an article entitled "The Aristotelian Use of *εἰσρατῆα* and *εἰσρατῆα*" (*The New Scholasticism*, XXXVII [1963], no. 3, pp. 312-26), Rev. Robert J. Roth, S.J. indicates two difficulties represented by the texts of Aristotle on this subject. The first difficulty concerns the suspicion of idealism which is generally deemed to be foreign to Aristotle's theory on knowledge. The author comments that it is a difficulty for the whole theory, which includes a psychic experience representative of reality on the non-spatial level. The problem is this: how does the spirit know the object without being closed within a world of ideas? The author adds that in fact, properly speaking, there is no complete critique of knowledge in Aristotle's writings; in these writings there is more a psychology than an epistemology in the modern sense of the term.

The second difficulty concerns the probability of error in intellectual life by reason of the dependency of this life upon images. Aristotle was surely conscious of the problem, but, as Father Roth says, he also saw the difference between the objective correspondence or non-correspondence of the image to reality and an affirmation or denial based thereon. In the *Metaphysics* (I, 5, IOIOb1) Aristotle says that "not everything that appears is true." There he is referring to the fact that one cannot trust images when the object is at a distance, or when the thinker is sick or asleep (cf. 1010 5b sq.). The author goes on to say that, in all cases where Aristotle indicates the danger of error as inherent in images, he seems to have in mind especially the correspondence or non-correspondence between image and reality; but he is also conscious of the fact that the knower can add the necessary corrections to prevent him from judging that the sun is only a foot wide, and he reproves those who use such examples for the purpose of casting doubt upon the validity of images as a basis for knowledge (precisely, in *Metaphysics* I, 5, IOIOb 1-11) (Cf. *art. cit.*, pp. 324-26). Has Father Roth fully grasped Aristotle's point of view, which is neither psychological in the sense the author attributes to it nor epistemological in the modern sense? It is a properly philosophical study of life and the degrees of life. Within sense life imagination represents a certain degree of life. The imagination function is a vital operation whose proper *nature* can be sought and whose *functions* in the very life of the animal or man can be specified.

by saying that it is a substance inasmuch as it is the form of the natural body which potentially has life. And since substance is an act (EvreA.€xeta), one can say that the soul is the EvreA.€xeta of the organic body. However, this must be understood in the sense that the soul is an act like science and not like the exercise or use of science; it is the first act (EvTEAEXEta] 1rho:m1).

This first approach lacks precision inasmuch as the soul is examined from the aspect of first philosophy and hence defined as substance and first act. The question of knowing whether the soul is separable from the body or not still remains. Is the soul an act of the body as the helmsman in his ship? To arrive at a proper definition of the soul, a definition which manifests the proper cause, another point of departure must be employed, namely, one that distinguishes the animated from the non-animated, that is, the fact of life. In this way one discovers inductively that the soul is that whereby the living thing exercises its various vital functions; the soul is that whereby we live, feel, and think.

To have a precise knowledge of what the soul is, then, there must be a study of these various vital functions and a determination of what they are. And since the proper objects of these vital functions (Tā aVTtKEtLEVa) exist before the functions themselves, these objects must first be defined, namely, food, the sensible, and the intelligible. After studying food and procreation in that order, Aristotle examines the various sensibles, from the visible to the tangible. Before taking up the intelligible (volJr6v), he pauses at the imagination, since it plays an intermediary role between the sensible domain and the intelligible. This fact, however, presents certain difficulties, since imagination cannot be dealt with as sensations have been treated or as thought will be dealt with; the imagination has no object previous to its activity. Let us make a minute analysis of the third chapter of Book III in order to see how Aristotle conducts his inquiry.

This chapter begins with a statement which is a radical resumption of the problem under consideration:

Since the soul has been defined especially by two differences, namely, local motion, as well as the fact of thinking (*voEi:v*) and foresight (*cppovEi:v*), and it seems (*8oKEi:*) that the fact of thinking and the fact of foresight are like a certain sensation (*aia-8avw-6at*)...

In fact there is something common; in the two cases the soul discerns (*Kpivet*) something, it knows (*yvwpitet*) a being. (This explains why the ancients say that the fact of being prudent (To <f>*pove'iv*) and the fact of sensation (To *ala0avea-8at*) are "one." Ernpedocles states: "Intelligence develops among men according to what is offered to their senses." And Aristotle cites Horner [*Odyssey* XVIII, 136] in this sense).

All these philosophers suppose (*Inro:Aap.[3avovaw*) that the act of thinking, like the act of feeling, is something bodily (*awp.anKov*) and that one feels and thinks like by like (*TO op.ovv*).

But Aristotle reproaches them for not having dealt with error (*7} chrarYJ*), which is more habitual (*olKetoTepov*) among animals and "constitutes that in which the soul spends more time." ²

It follows from this confusion

either that all appearances (*cpatvop.Eva*) are true, or that error is in contact with the unlike inasmuch as it is contrary to knowledge of like by like. But one ordinarily admits that, in the case of contraries, error, like knowledge, is one and the same.³

Having listed this question among the problems to be solved (*chropias*), Aristotle cannot admit this identification. So here again he states:

It is clear that feeling and practical thinking are not the same, since all animals share in the former, whereas only a few share in the latter. ⁴ Even less so is thinking the same as feeling, inasmuch as the experience of proper sensibles is true and belongs to all animals, whereas discourse (*8tavovEi:a6at*) can be false and never belongs to any animal lacking reason (*A6vo>*).⁵

• *De Anima*, TII, 3, 427b 2.

⁸ *Ibid.*, 427a 17; 427b 2-6.

• To *voe!v* involves being-right and being-wrong. Being-right includes and *o6;a* being-wrong includes their contraries (427b 9).

• *De Anima*, III, 3, 427b 6-14.

This distinction between feeling and foresight is taken here only on the basis of extension. The fact is that feeling belongs to all animals, whereas foresight does not. This, however, does not explain the difference between feeling and thinking.

Hence, to give a better demonstration of the impossibility of this identification, it is necessary to discern the middle term, the *JLErafv*, that is, the imagination. Indeed Aristotle does not make this reasoning explicit, but this argument is suggested on the basis of the remark he has just made and the study of the imagination following upon the remark. What is certain is that, having dealt with the imagination, Aristotle proves the need for recalling the confusion of the ancients concerning the various degrees of knowledge and their failure to consider the fact of error. Moreover, is not imagination to be distinguished from sensation as well as from intellectual knowledge if a precise understanding is to be sought of the various degrees of knowledge and a determination of the source of errors?

The imagination (*cpavraala*)⁶ in fact is different from sensation and discursive thought (*ltavov*).⁷ But it cannot arise (*y{yv£rat*) without sensation. Furthermore, without imagination, there is no act of admission (*lm-6A.IJt£L*).⁸ Evidently, then, it is not the same as thought (*v6lJmc;*) or supposition (*vTr6AIIJt£t;*), since this state (*TraBoc;*) depends upon us, that is, whenever we wish it (*f3ovA.6Jp.,£0a*) we can imagine whatever we want to imagine (inasmuch as it is possible to produce images before one's eyes, like those who produce and arrange images according to a mnemonic system). But the act of forming an opinion does not depend solely upon us; in fact one must be in error or in truth.⁹

• *Ibid.*, 427b 14.

⁷ In the *Sophist* dealing with the relations between being and non-being Plato already tried to specify the bonds existing among *ll.o'os*, and *£avral'ia* (260c and 263d).

⁸ *Tlroll.rr.f:s* (from *v7ro-ll.al-flavw*, take hold of from beneath, accept) is translated into Latin by *adsumptio* or *sumptio*. The French translators say "belief" (Barbotin, Tricot) or "conception of the spirit" (Mugnier, in the translation of the *Petits traités d'Histoire naturelle*, Paris 1953), or even "judgment." One could also translate this Greek noun by "admission," "acceptance," or even "apprehension." It is the first act of the intellect, which attains and takes hold of the universal. It is the most basic apprehension, wherein one takes hold of the whole; it is conception. Cf. Plato, *Euthydemos*, 295b; *Gorgias*, 458e; *Theaetetus*, 159b.

⁹ Cf. *Metaphysics*, K, 6, 1062b 34: to attach one and the same value to the *opinions* and *imagination*s of those who disagree among themselves is nonsense.

Let us get a grasp of the order in Aristotle's research. The problem concerns the specification of the fact that the imagination is different from both sensation and discursive thought (*Stavota*) and that, instead of continuing to speak about discursive thought, Aristotle speaks about the act of admission (1nr6A.7JI/M) and thought (vo'Y)CJ't<;) and argues on the basis of the act of opinion (Soga,etv). Hence one must grasp the ties among *Stavota*, 1m6A.7JI/Jt<;, VO'Y)CTt<;, and Soga,ew, which are all used by Aristotle in opposition to *cpawaCT/a*. Moreover, a bit further on (427b 25), without introducing a detailed analysis (inasmuch as it is not the matter of his principal concern), Aristotle stresses that there are various types of supposition, namely, science (ε7T&CTTTJP-'YJ), opinion (S6ga), and prudence (*cpoV7JCTt<*;), as well as their contraries. This not only shows us the basic character and the full richness of τ7TOA7JI/Jt<; but also enlightens us about Aristotle's reasoning. Among the activities of intelligence the most basic activity seems to be τ7TOA7JI/Jt<;, since it contains science, opinion, and prudence; and this is probably the reason why Aristotle stresses that there is no {m6'11.7JI/Jt<; without imagination. The basic character and dependency of τ7TOA7JI/Jt<; upon the imagination having been indicated, it is normal for the distinction between 1m6'A'Y)Jt<; and imagination to become the most urgent matter for the Stagira's consideration. And since {m6'li.'YJI/Jt<; is diversified in science, opinion, and prudence, it is clear that {m6A.'Y)Jt<; is least perfectly realized in opinion and hence that in opinion v7TOA7JI/Jt<; is closest to imagination. The act of making an opinion, then, is the first thing to be distinguished from imagination.¹⁰

We should have a good understanding of the first argument which Aristotle uses to distinguish imagination from opinion: man has a greater control over the exercise of imagination than of opinion, inasmuch as the exercise of imagination does not depend upon existing reality; the imagination does not depend upon either truth or error.

¹⁰ There remains the specification of the bonds existing among 0<ctvo<ct, v6'70<S, and 1nr6A.rl/ns; but this can be done only by treating of the *vails*.

In the order of knowledge we are faced with a particular type of knowledge which has an autonomy in reference to existing reality, since it depends only upon the will of the subject. This great reliance upon the will of the man, then, is what first characterizes the exercise of the imagination.

In his second argument, Aristotle stresses another aspect in the autonomy of the imagination:

when we form an opinion (*ooxatwp.fv*) that something is threatening or frightening, we are immediately (*fl,Bv>*) affected by it, just as in the case when something seems reassuring; but in imagination we are like spectators looking at something threatening or reassuring in a picture.¹¹

The affective repercussions from exercises of opinion and imagination can be very different, which shows that the causes are different, inasmuch as the effects are different. By this we see that, if we have a greater control over the exercise of the imagination, we are correspondingly less effectively disturbed by this exercise, which is less immediately connected with our affective life.

This, then, is the twofold independence of the imagination-in reference to reality as an object and to affective reactions-that Aristotle mentions here, as that which best indicates the irreducibility of the imagination to the act of opinion. This knowledge simultaneously appears to us to be more subject to our will than opinion and less affectively engaged than the latter; this shows us its character of being an independent and unrealistic knowledge.

Aristotle continues:

Since thought (*voftv*) differs from feeling and seems to imply imagination (*cf>avma[a*) on the one hand and the act of admission (*t7r6A"t/n>*) on the other, we must first investigate imagination and then supposition.

Hence, after distinguishing imagination from the act of opinion (which is a difference in *lnroA7Jt/n<>*), Aristotle now proceeds to

¹¹ *De Anima*, III, 8, 427b

examine what imagination is, and he will thereby be enabled to see what *imagination* is.¹²

Hence if the imagination is [the faculty] whereby we say a phantasm (*cpavmapa*) is produced (*yEv€a-8at*) for us, and if we do not give a metaphorical meaning to this term, it is a power (*8vvap.t>*) or state according to which we make the discernment (*Kptvop.Ev*) as to whether we are right or wrong. Such also are sensation, opinion, understanding (*vov>*), and science.¹³

There is the first definition Aristotle gives us concerning imagination; it is the source of the phantasm (*<f>avma-,ufn*) for us and hence a power or state enabling us to judge whether we are right or wrong. This is truly a first, very general definition (analogous to the first definition of the soul), which indicates to us what makes imagination to be related to sensation, understanding, and science. All of these are powers enabling us to judge whether we are right or wrong.

After distinguishing imagination from opinion, he goes on now to distinguish it from sensation:

Here is the proof that *cpavrau{a* is not sensation [this is clearly destined to precise Plato's statements in this regard¹⁴]. Sensation is either potential or actual (e. g., sight or seeing) whereas imagination occurs when neither of these is present (e. g., what is imagined in dreams) .¹⁵

What is the exact meaning of Aristotle's statement? Is not the imagination also potential or actual, like vision? This text is very elliptical. However, if we pay attention to what Aristotle has said as regards sensation, we can understand it. The imagination is not actual and potential in the same way as vision. To be in act, the latter depends upon the presence of color or light, whereas the imagination does not, inasmuch as it bears its own light and own form. Therefore, what is under-

¹² Aristotle deals with *imagination* when he investigates the activity of the voids.

¹³ *De Anima*, III, 3, 428a 1 sq.

¹⁴ Cf. *Theaetetus*, 152c: The imagination and sensation are identical for heat and other similar states. These are what each person feels and risks becoming.

¹⁵ *De Anima*, III, 3, 428a 5-7.

lined here is the twofold independence of imagination as regards its *object* and *environment*. It bears both in itself. That is why the two states "being potentially" and "being actually," so clearly distinct in reference to sight, are quite different in reference to imagination. It could be said that imagination is always in an intermediary state which is simultaneously actual and potential, since this power bears its forms in itself; hence it is always determined, but it is not always in ultimate act as regards all the forms in it.

The first reason given by Aristotle is therefore extremely profound. It indicates to us that, differing from sensation which is subject to the real and therefore to this distinction of potency and act, imagination, which is no longer subject to reality, escapes this distinction.

Aristotle then gives this second reason: "sensation is always present (mfpeCTn) but imagination is not."¹⁶ This second reason is even shorter and more elliptical than the first. It must, therefore, be interpreted, but from the context. Moreover, it has just been stated that sensation is potential or actual. Hence, if it is now said that it is always present, this presence is anterior to this diversity of states which concern exercise. Sensation is always present in animal life, whereas imagination is not. Sensation is proper to animal life, whereas imagination is not.

Having given these two reasons, Aristotle pursues his analysis by using a proof by way of impossibility: "if they were identical in actuality, all animals should have imagination."¹⁷ This, however, seems contrary to the facts. If one thinks of ants, bees, or grubs, it seems that these animals are not in the same situation as regards imagination. We should not forget what Aristotle says about bees when he is talking about blood:

that is why bees and other animals of this type are endowed with more prudence (cf>poVtp.wnpa) than many sanguine animals.¹⁸

¹⁶ *Ibid.*, 428a 8. The expression Aristotle uses here is *el-ra. a.ruiJf/utsp.év ae! 'll'apeuTt*. On this matter cf. *The Parts of Animals*, II, 647a 21: "So it is not possible that an animal exist without sensibility." (Cf. also III, 681a).

¹⁷ *De Anima*, III, 3, 428a 9.

¹⁸ *The Parts of Animals*, II, 647b 5 sq., 17. Cf. also *Metaphysics*, A, 1, 980b 25.

More profoundly Aristotle stresses that "sensations are always true, whereas imaginations are most frequently false."¹⁹ This reason is more profound than the others and more proper to the nature of knowledge. Sensations have this privilege of being more natural and thereby of being always true, whereas imaginations are knowledges which, being less determinate, more easily deviate from the truth; they have even a propensity to error.

The following and fifth reason is this:

When our sense is functioning accurately with regard to a sensible object, we do not say that seems to be a man to us; rather we say this only when we do not perceive clearly; hence sensation is true and is false.²⁰

This argument appeals to our way of expressing ourselves. When sensation is clear and precise (*aKpt{3wr}*), it has no need for an imaginative completion, and one does not confuse it with imagination. It is another matter when sensation is confused; at this moment it can no longer be distinguished clearly from imagination, to the point that it can be considered as being true and false. This shows that a weakened sensation is no longer distinguished with sufficient clarity from imagination and that by this very fact imagination comes to make up for this weakness.

Finally, there is the argument: "as we said before, one has images even when the eyes are shut."²¹ Imagination can last even after vision ceases, and this shows the independence of imagination. Although imagination seems to be that which completes our imperfect sensations, yet it has a certain autonomy as regards sensations, since it lasts even when the latter cease. Hence it is simultaneously related to our sensa-

¹⁹ *De Anima*, III, 3, 426a 11; *l{f;w}Jeis*. Cf. also *Metaphysics*, Γ 5, 1010b 3. In the *Sophist* Plato seems to state the inverse: "Is it not henceforth evident that thought (*III<ivota*), opinion and imagination are, in our souls, genera equally susceptible of falsity and truth?" (263d).

²⁰ *De Anima*, III, 3, 428a 12-14. Cf. the example about optics which Aristotle gives in his treatises on the *Meteorologica* (III, 2, 372b 8; 4, 374b 8 sq.).

²¹ *De Anima*, III, 3, 428a 15-16.

tions and yet autonomous, within a certain measure, in their regard.

These six reasons to which Aristotle appeals in order to show the distinction between sensations and imagination are surely of unequal value. Yet at the same time, they indicate the greater autonomy (by comparison with sensations) of the imagination with respect to existing realities (the imagination is not dependent upon the physical presence of the realities which it imagines) and its less basic ties with animal life, inasmuch as it is not a part of the essential structure of animal life.

If the complementary role of imagination clearly appears when it is a matter of our imperfect sensations, this role is less visible when our perfect sensations are involved. On the contrary, this role always appears in the order of duration and permanency. Finally, the imagination shows itself incapable of attaining truth; by its very nature it is an imperfect knowledge. Considered in relation to sensation and as distinguished from sensation, imagination simultaneously seems to be more autonomous (relative to the presence of the object), less perfect (considered in relation to its purpose), rarer and more developed (relative to animal life), and secondary, inasmuch as it supplies for certain imperfections.²² It can thus be seen how complex imagination is and how difficult it is to specify what it is.

Having so strongly indicated the congenital defect of the imagination in relation to truth, Aristotle indicates in a more profound way all that separates imagination from activities proper to the intellect:

Imagination cannot be any one of the operations which are always right, such as science or understanding (voii>), since imagination is also false and deceptive (.²³

This propensity to error has already enabled us to distinguish imagination from sensations; now it enables us to distinguish

²² In the *Rhetoric* Aristotle speaks of imagination as being a weakened sensation (*decrilev-IIs*) (1, 11, 1370a 28-29).

•• *De Anima*, III, 3, 428a 17.

it from science and the activities of the mind which are always true. Here Aristotle stresses a very important reason which shows the essential weakness of this type of knowledge. Science cannot be based upon it, since the perfect cannot be based upon the imperfect. Does not Aristotle denounce the error of Plato's dialectics which has not grasped this point with sufficient clarity?

However, although this propensity to error distinguishes imagination from sensation, it does not thereby distinguish imagination from opinion, since, like imagination, opinion can be true or false. Here lies a fundamental relation between imagination and opinion, a relation which had not been clearly stated as yet. Hence the difference of indetermination respectively of imagination and opinion in reference to truth must be precised; both imply this indetermination, but in various ways. To grasp these differences, the fruits proper respectively to imagination and opinion must be examined:

However, opinion implies belief ($\text{1}\text{r}\text{f}\text{a}\text{n}\text{>}$), since one cannot hold opinions about things which one does not believe; moreover, no beast has belief, but many have imagination."⁴

Although opinion permits the dawning of faith, imagination does not suffice for this. In opinion, then, there is an order to truth which does not exist in imagination; the latter is more basically indeterminate in reference to truth, since it does not permit the adhesion of faith.

Aristotle goes on to make further specifications in the same sense:

faith follows from opmwn , conviction (r6 7rE7rE'iaOat) from faith, and from conviction rational discourse (A.oyo>). Clearly, then, imagination cannot be opinion accompanied by sensation, or opinion produced by sensation, or a blend of opinion and sensation.²⁵

⁴*Ibid.*, 428a 20 sq.

²⁵ *Ibid.*, 428a 22 sq. This passage is extremely interesting if one wishes to understand the genesis of the 11'E11'EtriJat such as Aristotle understands it:

There is no direct passage from opinion to the 11'E11'EtriJat there is 11'E11'EtriJat between the two. And this implies an assent which makes a determination, whence the 11'E11'EtriJat is to arise.

If opinion gives birth to rational discourse and this cannot exist in the animal, although imagination can be in the animal, evidently opinion is something other than imagination. Here again the difference of indetermination (in reference to the truth) between imagination and opinion can be seen. If opinion, being imperfect, remains indeterminate, still it must depart from this indetermination, whereas imagination is indeterminate as a consequence of its nature; it cannot depart from this indetermination; of itself it is not ordered to rational discourse

This distinction should help us to gain a better understanding of the confusions of the preceding philosophers, notably the opinion which Plato defends in the *Sophist* ²⁶:

From the foregoing reasons it is clear that (if one pretends) that opinion is nothing other than sensation, but is this very thing, I say that imagination is the blend of the opinion and the sensation of what is white, since it could not result from the opinion of the good and the sensation of the white. To imagine, then, is to form an opinion on the very thing which is sensed, not in an accidental way. But, in fact, one imagines false things, concerning which one can simultaneously have a true apprehension (*inr6/.JIt{n,;}*); for example, one imagines that the sun measures a foot in diameter and one is persuaded (*rrl.rmaral*) that it is larger than the earth. ²⁷ It follows, then, that either the percipient, without any change in the reality itself and without forgetting or changing his conviction, has rejected his previous true opinion; or, if one still holds the previous opinion, but with little or hardly any conviction whatever, this opinion must be at once true and false. But it could be false only if the reality changed without our noticing it. Hence imagination is neither one of these functions nor a blend resulting from them. ²⁸

²⁶ In the *Sophist*, Plato defines imagination as the combination of sensation and opinion (264a). He also asks: "when opinion presents itself, not according to itself (*Kai' avri*), but through sensation (lit' *alueiw<ws*), can such an affection (*7riIJos*) be correctly entitled with some name other than imagination?"

²⁷ Let us observe that Aristotle seems to express the same intellectual attitude by the fact of having a *V7r6lvp/JLS* and the fact of being persuaded (*7r<7l"<lulJat*).

²⁸ *De Anima*, III, 3, 428a 26-428b 10.

In other words, if opinion and sensation were identical, imagination could be only the composition of the two, but of two which bear on the same sensible reality. In this event, however, certain impasses would ensue, since it is very easy to have a true opinion about such or such a reality and have a false imaginative representation of it, the example of the sun being extremely clear. If, then, sensation and opinion are identical, it must be admitted that opinion is reduced to imagination, or vice versa. In the first case one abandons one's true opinion to the advantage of imagination and sensation, and this in an unlawful way; in the second case, if one holds on to one's first opinion, one must then abandon the representation one makes of it. Now opinion is true or false, but it can be false only if the reality has changed without our knowledge, and this can no longer be verified, since sensation is reduced to opinion. Hence to make opinion and sensation identical is to make both of them meaningless, and likewise imagination by the same token.

After distinguishing imagination from sensation and opinion, Aristotle can again examine imagination in itself. However, imagination cannot be considered in itself as are sensation, vision, or touch, since imagination is not a basic and first knowledge; it is knowledge of knowledge. Furthermore, it is not a perfect knowledge having its proper finality in itself; it is a relative knowledge. This is why imagination is so difficult to grasp. This enables one to understand the manner in which Aristotle is going to consider it:

But since when a particular thing is moved another thing can be moved by it, and since imagination seems to be a movement (*K[ν]λ[ι]μ<*) which cannot occur (*ν[υ]ν[ω]α[ι]*) without sensation, it concerns only things experienced [object] and belongs only to those who have sensation [subject].²⁹

Everything that has been said previously leads to this affirmation: imagination is a movement resulting from sensation.

²⁹ *Ibid.*, 428b 10-11. Cf. also *Physics*, VIII, 3, 254a 29: "the imagination and opinion (M!;a) seem to be certain movements."

Now, inasmuch as sensation is also a movement, imagination is a movement of a movement; that is, it is not a first movement like sensation, which is actuated by an object that moves without being moved; rather, imagination is actuated by a movement. It is, then, a movement which has a two-fold relativity, namely, that of movement and that of its origin, which explains its extremely mobile and relative character. Imagination is a movement in the order of knowledge. As regards what is deepest in it, knowledge is beyond movement. It achieves the unity of the person who feels with what is felt, although its modality implies a movement.³⁰ Sensation is realized after the manner of an alteration.³¹ But this special type of knowledge which is imagination is a movement; it is becoming in the order of knowledge, where there is no fixed point on one side or another. It is the conscious sensible *fluxus*, immanent to the living thing, the perfect animal. This *fluxus* is achieved through contraries by implying a subject beyond contraries and capable of bearing them. Imagination is a dialectical movement which in itself is neither perfect nor imperfect but which has a propensity to be degraded.

All this characterizes the imagination in the order of knowledge and also stresses the conditions of its exercise (it can be exercised only in relation to things experienced), as well as the conditions of its existence: it can exist only in a living thing which possesses sensation, that is, an animal. Here we are indeed in the presence of the definition proper to the imagination (analogous to the proper definition of the soul).

Aristotle goes on to specify that this essential dependency of the imagination upon sensation establishes it in a very particular situation:

And since movement may be caused by actual sensation, so that this movement must be like the sensation, such a movement cannot exist without sensation or exist in non-sentient beings; in

³⁰ *De Anima*, III, 8, 431b "Science is identified in some way with objects of knowledge, just as sensation with sensed objects."

³¹ *On* 459b 5: "since active sensation is a certain alteration
It.S) ."

virtue of it the possessor can do (*TOLELV*) and suffer (*IT<L<J'XELV*) many things (*IroAAa*), as well as be true or false.³²

Resulting from sensation, imagination itself is similar to (*Sp, oia*), without thereby becoming identified with, sensation; that is, it remains a sense knowledge which cannot exist without sensation. If, then, it is limited in this aspect, inasmuch as it cannot surpass the domain of what has been sensed, yet it has a very great extension; it has a capacity for "making" and "undergoing" many images which are true or false. What characterizes the imagination is the *Irote'Lv*, inasmuch as the *Iraaxetv* is common to imagination and sensation.³³ Imagination is a knowledge which makes and undergoes. Another differentiation from sensation lies in the fact that imagination is true or false, as Aristotle has already noted.

Since imagination is the movement engendered by sensation, if the latter has differentiations, so, too, the former will necessarily have differentiations. Can one, then, specify various degrees of perfection as one does for sensations? Here is Aristotle's argumentation, which begins by recalling what he had said previously:

Now this occurs for the following reason. The experience of proper sensibles is always true, or admits of error only to the least degree possible. Secondly, there is the perception that these proper sensibles belong to someone accidentally, and here already error is possible; one can make a mistake not in the fact that there is something white, but whether the white object is this or that thing. Thirdly, there is the perception of common sensibles which are consequences of the sensibles to which the proper sensibles accidentally belong; I mean, for example, motion and magnitude, which are accidental to the proper sensibles; it is about these that error in sensation is possible to the highest degree. Thence the motion resulting from actual sensation will differ according to these three types of sensation. The first motion, resulting from the first sensation, is true when the sensation is still present. The others, how-

³² *De Anima*, III, 3, 4918b 14-17.

³³ Cf. *De Anima*, II, 5, 417b 12, where Aristotle specifies the meaning of *ro* *?Tauxetv* in reference to sensation; and *On Dreams*, 91, 459b 917: the fact of mirrors proves at the same time "that vision acts (*?To<<i n*) just as it acted upon (*?raux<<*)."

ever, can be false whether the sensation is present or absent, and especially when the sensible object is at some distance.³⁴

This passage shows us how there is a possibility of error even on the level of sensations and how this possibility will be encountered again, and will be amplified on the level of imagination. In fact there is only one sole case wherein it can be said that sensation is true, namely, when sensation concerns the proper sensibles.³⁵ Aristotle adds that it "admits of the minimum (οΑ.ιγτρΤοv) of error." The same character of truth is found again in the motion resulting from this sensation; the character of truth in sensation is extended to the imagination when the sensation remains actually present; in this way it guarantees direct contact with the proper sensible.³⁶ We are in the presence of the most natural knowledge, which safeguards the finality proper to natural movements; they attain their purpose in most cases (*ut in pluribus*). For knowledge, the attainment of its proper purpose means to be true.

The other two cases of sensation imply certain possibilities of error. The possibility of error enters as soon as it is no longer a case of the proper sensible but of the accidental sensible (*this* white rather than *white*) or the common sensibles, which result from the accidental sensibles (the movement of *this* white). The proper sensibles are indivisible in themselves and can imply movement only as a consequence of their proper bodily subject. The possibility of error results from composition; what is seen is no longer *white*, but *this* white; *this* is seen through *white*, since only *white* is directly sensed. As soon as there is composition there is no longer direct knowledge, and so there is the possibility of error. One is no longer in the presence of a natural and first movement, perfectly determined

³⁴ *De Anima*, III, 3,

⁸⁵ Cf. *De Anima*, II, 6, 418a 14 sq.: "each sense discerns (Κριv..) the sensibles proper to it, nor is it deceived as to the fact of color or sound, but only as to the nature or place of the colored object or the sound-producing object."

•• Cf. *On Sense and Sensible Objects*, where Aristotle speaks about the imagination of color (17 εαvραυλα xp6as): "The imagination of color is determined in determinate bodies, if the surrounding environment does not change it."

by its object. There is composition. Through the sensation of white something else is attained, and this composition is achieved thanks to a habit, a series of knowledges. By this very fact it leaves the possibility of producing a bad composition, namely, *this* white, which one thinks is a wall, is in fact only a cardboard decor. White can be rigorously the same while having various subjects, since the bond between white and this subject remains accidental in comparison with the white.

Aristotle stresses that the possibility of error is the greatest in regard to the common sensibles. However, these sensibles remain sensibles, and they seem to be grasped less indirectly than the accidental sensibles; the movement seems nearer the white than the *this*.³⁷ The reason which Aristotle gives is precise. These sensibles are derived from the accidental sensibles, and therefore they are reunited with the proper sensibles through the accidental sensibles. There is, then, a twofold composition in their regard and hence a twofold possibility of error.

These possibilities of error are found in the imaginary movement provoked by these two types of sensation. This is normal since the imaginary movement resulting from a complex sensation will itself imply the same complexity; the effect cannot be simpler than its cause. And the possibility of error increases if, in fact, the experienced sensible is distant.

We should note that here Aristotle distinguishes three types

³⁷ Cf. *Anima*, II, 6, 418a 8, where Aristotle expressly says that the sensible involves three species, two of these being sensible "in themselves" (*Ka.O' a.vnt*), the other being a sensible "by accident" (*Ka.ra <Tvp,(;Jef:JrJK6s*). It is very curious to note the different order of species of sensible which Aristotle gives in this sixth chapter of Book II as related to the one he gives in the third chapter of Book III concerning imagination. In the sixth chapter (Book II) he distinguishes *per se* sensibles from accidental sensibles according to their proper order to sensation. Only the proper sensible and the common sensible are truly sensed, whereas the accidental sensible is not truly a sensible: "the sentient subject does not undergo any passion resulting from the accidental sensible" (418a 23). Whereas in the third chapter (Book III), the Philosopher considers the sensible only in connection with its very existence, its capacity for stabilizing knowledge; the order is no longer the same. It is the common sensible which most frequently is the source of confusion.

of sensation relative to three types of sensibles; and he distinguishes them according to their possibility of imperfection, since the possibility of error results from the imperfection of knowledge as such. And this hierarchy proper to the sensible is found to be extended to imagination through the intermediary of the corresponding sensation. This is still very significant; the various imaginations are graded according to the various sensations which are at their source, just as the various sensations are graded according to the various sensibles which are their proper principles. Hence these various imaginations depend on sensations for their gradation. They have no proper principles in themselves whereby they could be graded according to their proper perfections. That is why it is not necessary to conclude that there are three types of imagination as there are three types of sensibles. These various imaginations are specifically the same, but they have more or less broad possibilities of error as the produced sensible image especially represents proper sensibles, accidental sensibles, or common sensibles, and as the sensible reality is actually sensed or not. Since the only thing which rectifies the imagination is sensation, the latter, to the extent that it is more or less true, can rectify the imagination in the same measure.

Thereby we are strongly enlightened concerning the frailty proper to the imagination, as well as the diversity and richness of its own field of investigation. Everything sensible is its domain.

Aristotle closes this chapter by making a final attempt to define what the imagination is:

Hence if no function other than imagination possesses the characteristics which we have indicated and if it is always what we have just said it is, it should be defined as the movement produced by sensation actually functioning.³⁸ And since sight is the sense par excellence, the imagination has its name (*cpavrau[a]*) from light (*cpαβ*>) inasmuch as vision is not possible without light.³⁹ And

³⁸ Cf. *On Dreams*, 1, 459a 17, where the same definition is encountered: imagination is the movement engendered by sensation in its act.

³⁹ Is there a resumption here, but in a quite different sense, of what Plato said in the *Kratylos* concerning Hephaistos (407c)?

since the images remain and are like sensations, the animals achieve many actions as a result of these images, some animals, namely, beasts, because they have no mind (*VOV<>*), others, namely, men, because their mind is at times clouded by passion, diseases, or sleep. Concerning imagination, then, let what we have said about its nature (*n lo-n*) and cause (*IM n lo-nv*) suffice.⁴⁰

Hence Aristotle resumes what he had already said previously and states it more precisely: "Imagination is the movement engendered by sensation in act."

This movement which is imagination is connected especially with vision, since this is the most excellent sensation. Hence vision is the privileged, but non-exclusive, source of imagination. Aristotle does not treat the problem, but one can say that he does not exclude any sensation as the cause and source of imagination, except perhaps touch, since it can be an isolated sensation.⁴¹ It seems that a certain perfection of animal life is needed before imagination can appear.

Finally, Aristotle notes that images last and are "like sensations" and that because of them animals and men accomplish many actions. Here, then, Aristotle stresses the permanence of images, their similarities as regards sensations, and their power, a principle of operation.

That the images last longer than sensations has already been indicated and shows one of the characteristics proper to imagination, namely, its independence with regard to sensible realities and therefore also with regard to time.

It is very important to note that images are like sensations. Aristotle had already indicated that imagination, a movement resulting from sensation, was necessarily like sensations. Hence there is a similarity on the level of operations, as well as on

⁴⁰ *De Anima*, III, 3, 9.

⁴¹ Cf. *De Anima*, II, 413b "Living things endowed with touch have desire but do they possess imagination? That is a doubtful question." And III, II, 434a where the same question is raised: "In imperfect animals having only touch, can imagination exist along with desire (*Im8vflav*)? They have pleasure and pain, and hence an appetite. But how would they be endowed with imagination? Here one must answer: 'as they move themselves in an indeterminate way, so these functions belong to them in an indeterminate way' (*aopirrTws*)."

the level of the respective objects; this is normal since it is a question of knowledge functions. Can one go further? We know that the philosopher states that it is proper to sensation to receive the form (εΤ8ος-) without matter (*avev Tijjs- vATJs*).⁴² Moreover, speaking of images, he says also: "images are like sensed objects except that they are without matter."⁴³ Let us grasp this point well: sensation is the *form* of sensed things, and images are what is attained by the imagination, just as sensed things are attained by sensations, with this difference, however, that images do not imply matter; they are pure sensible forms.

These imagined forms are like the forms of sensed things. Now Aristotle has specified that sensible forms can be understood in three different ways, namely, the proper sensible, the common sensible, and the accidental sensible. Here we are faced with three degrees of sensible. Only the proper sensible is an absolutely pure and simple sensible; the two other types are connected with other elements, namely, the subject or properties of this subject. Are phantasms similar to these three species of sensible? Are there three degrees of imagination and phantasms as there are three more or less pure degrees of sensation?

Aristotle does not treat this question explicitly. However, he stresses the point that the imagination following upon the sensation of the proper sensible cannot be erroneous as long as the proper sensible remains present; at this moment, then, the image prolongs the sensation without deforming it. It could be said that this imaginative representation of what is actually sensed remains similar to what is sensed.⁴⁴ But from

•• *De Anima*, III, 8, 431b 434a

•• *Ibid.*, 8, 9-16.

•• As regards the "movement produced by sensation in act, this movement necessarily being like sensation" 14), De Corte writes: "Such a dynamic initiative

can be produced *simultaneously* at the presence of sensation and hence of the object concerning which there is sensation; thus the image constitutes, as it were, a sketch of what the scholastics will later call the *species expressa* corresponding to the entitative and cognoscitive information of the *species expressa*, wherein the knower contemplates the object known. It can be prolonged in the absence of sensation

the moment when the sensation is no longer actual, the imaginative representation no longer has the same determination; it can lead us into error. When we close our eyes, the representation of red is no longer the sensation of red which we had previously when we looked at such and such red reality. The proper sensible which immediately determines sensation determines the imagination only through sensation and hence imagination is never determined immediately by the proper sensible; it is determined only through sensation, that is, by the form of the proper sensible as lived through and in sensation. By this very fact this form is always bound to movement and to a certain subject. On the level of the image the various species of sensible can no longer be distinguished, since all of them

and the object, and it is understood that, in this case, the object known is known only proportionately to the length of this absence, the sensation being no longer there to insinuate in the imagination the strength and freshness of its act. *That is why the repetition of sense knowledge, induction, and experience are necessary for the development of knowledge.* Furthermore, that is why the imagination as a dim and hazy representation of an object consequently perceived as such through its phantasm should be constantly helped and put aright by the imagination inasmuch as it is connected with the present sensation. To acquire the value of knowledge, and of the sole knowledge which has value in Aristotle's eyes, namely, that of an object, the imagination should be in continuous correspondence with sensation which determines its power for apprehending the real. The result of this is that it appears very close to *common sense (sensus communis)*, but, while the latter registers sensible reality, the imagination, without reconstructing this reality, perceives it through the phantasm which it expresses in conformity with the data impressed upon it. In the proper sense the imagination is, consequently, fully that which it is as a knowing faculty only by actual union with sensation and with the object which provokes sensation."

Then De Corte adds: " One gains a glimpse of the important place which this faculty occupies in the systematic organization of conceptual knowledge. Relying upon sensation, [the imagination] depends upon it as a consequence of the object, but it transcends the latter as a consequence of its superior causality, which utilizes it as an instrument of knowledge. In this way it raises itself to the level of rational functions. According to Plutarch, who on this point successfully extricates the virtual content of Aristotle's thought, the imagination truly constitutes the intermediary between sensation and thought, the hinge around which knowledge turns. Does not Aristotle go as far as speaking about an imagination having an intellectual character, *εαυραρρα* (*De Anima*, III, 10, 433b 29. Cf. 11, 434a 7, and *Philopon*, 515, 12)? " (M. De Corte, *La doctrine de l'intelligence selon Aristote* [Paris: Vrin, 1934], pp. 173-175).

are united and present. This is what explains how the form of the common sensible very easily becomes predominant in the image.

Finally, let us not forget that images are operational principles in the life of the animal and that for men the emotions, diseases, or sleep restore a primordial value to the imagination. We shall have the occasion to specify this fact when we consider how Aristotle indicates the functions of the imagination in his other treatises.⁴⁵

We should note that, from another aspect, Aristotle determines the organ of imagination only in a very general way. Unquestionably, for him, the sensitive faculty is not without the body, without a bodily organ; only the mind is separated.⁴⁶ Since the imagination forms part of the sensitive soul, then, it should have a bodily organ.⁴⁷ It can exist in certain animals. However, Aristotle distinguishes the imaginative part from the sensitive part and the appetitive part, and he states that, according to its being, this imaginative faculty differs from the other faculties.⁴⁸

At the end of the analysis of this chapter 3, as we compare this chapter with the preceding chapters, we are very surprised to ascertain that here Aristotle no longer determines imagination, as a vital function, by its proper object, although he had

•• Cf. *The Motion of Animals*, 7, 701b 16, where Aristotle emphasizes that sensations are alterations and that imaginations and the *v07Jr'l's* have the power of realities. Although all three of these change, yet imagination and thought have something special, in the sense that they have, as it were, a power.

•• *De Anima*, III, 4, 429b 5.

⁴⁷ Cf. *Eudemian Ethics*, H, 2, 1235b 29. "Imagination and opinion are not found in the same (part) of the soul." Cf. also *On Dream.s*, I, 458b 29, where Aristotle asks the question about knowing whether the imaginative faculty (*ro <f>avraunKov*) and the sensitive faculty of the soul are identical, or whether they differ from each other. A bit later, referring to the study of the treatise *On the Soul*, Aristotle asserts: "since the imaginative faculty (*ro <f>avraunKov*) is identical with the sense faculty, their being (*ro elva<*) is different" (1, 459a 15 sq.).

•• *De Anima*, III, 9, 432b 1 sq.: "Then comes the imaginative part (*ro <f>avrau-T<KilV*) which seems to be essentially different from all the others, but which is extremely difficult to identify with, or distinguish from any of these parts, if one begins by supposing that the parts of the soul are separated from one another."

announced and used this method previously. His dominant concern is simultaneously to distinguish imagination from sensation and thought (reasoning) and to establish it as a movement resulting from sensation.

We understand why Aristotle has changed his method very radically without giving us a warning, since, when it is a question of imagination, it can no longer be said that the object is anterior to the function; in the strict sense there is no *object* for the function of the imagination, but there is a *fruit*. The imagination produces an image, a phantasm. This image exists only for and in this act; it does not exist previously. On the level of imagination the subject-object distinction, then, can no longer be applied; the imagination can no longer be understood other than in its own exercise. To know what it is, we must seek its efficient cause, since it has no final cause. That is why the genetic method is called for, and only this method enables us to know what it is.

II. *The Role of Imagination in the Development of Our Human Life.*

In the order of knowledge, imagination appears to be only a mean. It is neither good nor evil, all depending upon the use one makes of it. In itself it is a possibility of advancing further, inasmuch as it possesses a greater autonomy than sensations; but it can also occasion a terrible withdrawal, imprisoning the person who knows within himself, within his experience. The imagination can permit an emphasis of the known sensible, the proper sensible, but it can also imprison the knower in his own subjectivity: it is an idealizing knowledge. Let us see how Aristotle shows us this role of imagination in the development of our human life.

a) *Functions of the Imagination in Intellectual Knowledge, in the Perspective of the DE ANIMA.*

If imagination is a movement resulting from sensation, it is utilized by our intellective soul in its various activities.

Speaking of the discursive (*stavor/nK1J*) soul Aristotle underlines the following:

the images (*-r<i cpavraupma*) are present to it (*{m-afxn*) as sensibles (and when it affirms or denies good or evil, it avoids or pursues them. That is why the soul never thinks without an image (*avEV cpavraup.ara*).⁴⁹

Then, after recalling the role of common sense, Aristotle concludes:

The noetic faculty, then, thinks the forms (*ra t8YJ*) in the phantasms. And just as it is in these phantasms that there is the determination of what it is to seek or to avoid, it is moved, even outside sensation, when it is occupied with images.... At other times by means of the images or thoughts which are in the soul, one calculates (*>.oy[,€rat*) and deliberates, as though one saw future matters in present data.⁵⁰

These various assertions clearly show that, for Aristotle, the image is indispensable for discursive thought. Yet, although one cannot think without an image, the image, however, is not what determines and specifies our thought. The image is a necessary condition; it is not the object which activates our noetic knowledge.

Discursive thought, however, is not the only thought which needs images; the same is true of the contemplative soul:

moreover, when one contemplates (*OEWpfi*), the contemplative act is necessarily accompanied by an image.⁵¹

And, in terminating his analyses of intellectual activity, Aristotle asks himself this question: "How then are the first

⁴⁹ *De Anima*, III, 7, 431a 14 sq. The same affirmation is found in the tract *On Memory and Recollection*, I, 449b 30-31: "One cannot think without images." Aristotle had asked himself the question at the beginning of his study *On the Soul* "The act of thinking (*To vo<iv*) seems eminently proper to the soul. If this activity is identical with a kind of imagination (*</>avTauia*) or if it can function without the imagination, even this cannot exist apart from the body" (*De Anima*, I, 1, 403a 8).

⁵⁰ *De Anima*, III, 7, 431b 2-7.

⁵¹ *Ibid.*, III, 8, 432a 8.

intelligibles (*Ta 1pw-ra* distinguished from images?"⁵² Aristotle had just asserted that imagination is distinct from affirmation and denial inasmuch as these imply a synthesis (of intelligibles. Without solving the question, since it pertains not to the *De Anima* but to first philosophy to provide the answer, Aristotle suggests that these first intelligibles are not images but that they never exist without images.⁵³ It is always the same doctrine that is asserted: our intellectual activities, those which reason as well as those which contemplate, always presuppose the presence of phantasms; but they use phantasms to attain the intelligible forms and to attain reality, affirming or denying its existence and what it is.

For Aristotle this is very clear; only sensations and the activities of the intellect can attain existing reality; the imagination can attain only phantasms, sensible forms without matter. But these phantasms are utilized in all our intellectual activities, from the least perfect to the most perfect.

If the imagination is present to all our intellectual activities, it is also present, and in an even more determinant way, for the formation of language whereby we can communicate what we think to others. Let us cite this striking text:

not every sound (*ta ktēta*) made by an animal is a voice
 One can make noise with the tongue, like those who cough; but
 that which produces the noise must have a soul and use some
 imagination (representation: *ta ktēta ktēta avraa(a, nv6<>*), since the voice
 is a certain sound capable of signifying (*ta ktēta ktēta avraa(a, nv6<>*)⁵⁴

The signification of the word, which is proper to the word, demands a certain presence of imagination.

Finally, let us note this passage from the *Metaphysics*: "not everything that appears (*ta ktēta ktēta avraa(a, nv6<>*) is true Even if the sensation does not deceive us, yet imagination is not the same thing as the sensation (*ta ktēta ktēta avraa(a, nv6<>*)⁵⁵

⁵² *Ibid.*, III, 8, 432a 12.

⁵³ *Ibid.*, III, 8, 432a 13-14.

.. *Ibid.*, II, 8, 420b 32.

⁵⁵ Cf. *Metaphysics*, I, 5, 1010b 1-11.

b) *Functions of the Imagination as Regards the Local Movement of the Animal. Imagination and Desire according to the DE ANIMA.*

In his search for the principle of local movement in the animal Aristotle observes that this faculty is not the nutritive power. This movement itself "is always with imagination or desire" (f-LETA cf>avract[a<;1] .⁵⁶ And he specifies:

There are two principles of local movement; desire and mind (vov>), if one deems imagination (cpavTaa-lav) to be a certain understanding. ⁵⁷

Then, to support his assertion, the Philosopher recalls:

Frequently men turn away from science to follow their imaginations, and the other animals possess neither understanding nor reason (A.oyp,0>) but only imagination. ⁵⁸

Here, then, are the two principles of every local movement in the animal: the practical intellect or imagination and desire. ⁵⁹

But if the intellect is always right, "desire and imagination can be right or wrong." ⁶⁰ Then, terminating this analysis of the moving principle of the animal, Aristotle summarizes his thought:

In general, then, as has been said, insofar as the living being is capable of desire, it is also capable of self-movement. The faculty for desire, however, is not without imagination (avfv cf>av-ractia>), and every imagination is either rational or sensible. The latter is what is shared by other animals besides man. ⁶¹

We should get a good grasp of this assertion: "every imagination is either rational or sensible (.
It is a matter of discerning two different exercises of the imagination, one done with understanding, the other only accom-

•• *De Anima*, III, 9, 432b 16.

⁶⁷ *Ibid.*, III, 10, 433a 9-10.

•• *Ibid.*, III, 10, 433a 11 sq.

•• *Ibid.*, III, 10, 433a 20: "When the imagination moves, it cannot move without desire."

•• *Ibid.*, III, 10, 433a 27.

⁶¹ *Ibid.*, III, 10, 433b 27 sq.

parrying sensation. For conviction in this regard it is enough for us to read the explanation which Aristotle himself gives concerning these two types of imagination:

Sensitive imagination exists even in irrational animals, whereas deliberative (*{3ovA.ÉvnKrÿ*) pertains only to being endowed with reason. For to know whether one will do this or that is already the work of reasoning Hence they [the beings endowed with reason] can form a single image from many phantasms. And the reason why inferior animals seem not to possess opinion is that they do not have that sort of imagination which proceeds from the syllogism, inasmuch as this presupposes the former.⁶²

Here Aristotle no longer speaks about rational (*A.oyta-nKr*) imagination, but about deliberative (*{3ovAEvnKr*) imagination. But it is easy to understand that it is always a matter of distinguishing the two sorts of exercise regarding the imagination.⁶³

These two chapters (9 and 10) of the third book of the *De Anima* clearly show the capital role of imagination and desire in the local movement of the animal. The very intimate cooperation between imagination and desire enable the animal to move himself, since it shows him what he must avoid and what he must seek. Here we see the very close bond existing between imagination and desire, and hence between imagination and affective life. However, Aristotle does not develop this question in the *De Anima*, since what he seeks is to determine what the soul is by analyzing its proper functions. It is enough for him, then, to specify what actuates vital local movement.⁶⁴

⁶² *Ibid.*, III, 11, 434a 5 sq.

⁶³ Cf. *On Memory and Recollection*, 1, 453a 14. Speaking about willing (*ro fJov'ÉvnKov*), Aristotle asserts: "for the act of deliberation (*fJov'Éveuoat*) is a certain syllogism (*uv'/'l.o''(<<YfIOS)*"

⁶⁴ Examining the role of desire, Aristotle shows that this desire which is exercised on the basis of a quality which attracts somebody or makes him flee, can be exercised only because of thought or imagination. We cite this curious text: "Hence the principle of movement is that which should be pursued in the order of action, and it is necessary that the hot or cold quality of what is pursued or avoided be accompanied by thought or imagination" (*The Motion of Animals*, 8, 701b 35). Cf. 7, 701a 33: "Cupidity tells me that I must drink; and that the *voOs* or imagination or sensation asserts that it is to be drunk." Likewise, 701a 36: "Desire is the ultimate cause of the act of stirring, which proceeds by sensation or by imagi-

If we now examine the other works of Aristotle, we can complete that which is told to us in such a precise and sober way in the *De Anima*. We shall consider first the role of imagination with regard to memory and the bond between imagination and dream and then shall go on to the examination of the role of imagination with regard to the emotions and the will.

c) *Imagination is the Source of Memory.*

Aristotle shows the connections between imagination and memory in his small treatise *On Memory and Reminiscence* where he asks what memory and reminiscence are (n Ecm), through what cause (8L<l nv airiav) they occur, and what part of the soul is concerned with this affection and the act of remembering.⁶⁵

The first thing to recognize is that memory considers neither the future (which is the object of opinion and hope) nor the present (which is the object of sensation) but the past (ro trapov).⁶⁶

Memory is neither sensation nor supposition (Inrol."tfru;), but possession or modification (mi8o>) of some of these, when the time occurs.⁶⁷

Time is always connected with memory. Reflecting upon this perception of time as involved in memory Aristotle observes:

We necessarily know (yvwp[,Hv) magnitude and movement by that which makes us know time; and the phantasm (ro cpavraafLa) is an affection (7r6.8o>) of common sensation (r-ij> Kowry> .⁶⁸

Here one remains in sensible knowledge. The memory of intelligibles (rvv voYJrvv) cannot take place without an image

nation and thought." And again 701a 30 anent desire: " it is immediately achieved when it is in act by sensation or imagination or intellection in reference to the aim desired."

⁶⁵ *On Memory and Recollection*, 1, 449b 4-6.

⁶⁶ *Ibid.*, 1, 449b 14-15.

⁶⁷ *Ibid.*, I, 449b 24-25.

⁶⁸ *Ibid.*, I, 450a 9-11.

(*avev cpavnfCTp,ar6<;*)⁹ in such a way that memory is not applied immediately to intelligibles; it can be applied to them only through the imagination; in itself memory is a sense. Hence Aristotle can answer the question: to which part of the soul does memory belong?

It is clear that that part of the soul from which memory rises is precisely that part to which imagination belongs and that what is imaginable is of itself capable of being memorized, and that what is an accidental object of memory is no object without the imagination.⁷⁰

Furthermore, Aristotle asks how it happens that the image remains in some, whereas it hardly penetrates the memory of others.⁷¹ Why do children and old persons seem to be those who have the least memory, like those who are in a state of flux, as though the impression of a seal were applied to running water?⁷²

This point clearly shows the difference and the relationship existing between imagination and memory. If the latter always presupposes the former, it implies in itself certain proper demands, namely, of time and of permanency; the image should last. Memory appears to be a knowledge which is more realistic than imagination.

Seeking to specify what memory is, Aristotle observes:

The animal painted on a board is at the same time an animal and a copy (*fiKwv*), and, while being one and the same, it is these two things; however, the fact of being (*To dvat*) is not the same for the two things, and it is possible to look at it both as an animal and as a copy. So we must suppose that the phantasm in us is something which is by itself, as well as the phantasm of something else. Consequently, inasmuch as we consider the phantasm in itself, it is a representation (*{hwp7Jp,a}*) or phantasm; inasmuch as it is of some other thing, it is like a copy or souvenir.⁷³

•• *Ibid.*, 1, 450a IS.

⁷⁰ *Ibid.*, 1, 450a flS.

⁷¹ *Ibid.*, I, 450b 10.

•• *Ibid.*, I, 450b fl.

⁷³ *Ibid.*, 1, 450b fl0 sq. (*etKwv* as translated into Latin by *imago* and *cp&.vTa.upa* by *phanUlsma*).

The phantasm, then, can be used in two ways: it can be considered in itself as a phantasm or also inasmuch as it is an image of some other thing. In the first case it is the imagination which perceives it in the surest way. In the second case it serves as a "copy" or "memory" (*eiKwv* and */LVTJ/-L6vevi-La*). This enables us to make a still better discernment between imagination and remembrance.

For Aristotle this distinction is very important, and the confusion which can be made between these usages of the image explains certain errors. Certain persons, in a state of ecstasy (*€gtO*"*Ta*"/*Levot*) "spoke of phantasms as though they were reality and as if they remembered them. This happens when someone looks at what is not a copy as though it were a copy." ⁷⁴

As regards reminiscence (*avaiLVTJO*"*t*'>) Aristotle asserts: "reminiscence is a search for the image in that very thing (*€v Totovnp*)." ⁷⁵ And if melancholic persons are easily troubled when they ought to recall, it is that "images excite them to the highest degree (*/-LaAtO*"*m*)." ⁷⁶

d) *Imagination and Dreams.*

If one wishes to understand the connections between images and dreams such as the Philosopher conceives them, one must completely analyze Aristotle's short treatise *On Dreams*. ⁷⁷ **I**t suffices, nevertheless, to go to the end of this treatise to understand how the Philosopher defines the dream by the image:

... The dream is not every image (*cf*><*fvm̄ap,a* *Irav*) which manifests itself in sleep ... just as it is not every truthful thought which comes to us in sleep independently of images (*Ir̄apa Ta cf*>*avn̄fap,a**Ta*).

.. *Ibid.*, I, 451a 10 sq.

⁷⁵ *Ibid.*, I, 458a 15.

⁷⁶ *Ibid.*, I, 458a 19.

⁷⁷ *On Dreams* (ITepI I, 458b 1 sq. This treatise begins in the following way: "After these studies, we must first investigate, on the matter of the dream, in which part of the soul it appears and whether it is an affection of the noetic or sense part."

But the image which derives from the movement of sensible impressions when one is asleep and insofar as one is sleeping, that is the dream. ⁷⁸

The bond between the dream and memory can be seen: the two are connected with the image and with sensible impressions, but one is achieved while a person is awake, the other in the state of sleep. The image plays an essential role in both cases, but just as one cannot identify image with memory, so one cannot identify image with dream. However, just as there is no memory without image, so there is no dream without image.

Here let us quote certain passages of this small treatise which seem particularly interesting to us with a view to grasping the bonds between image and dream. After asserting that we "feel" dreams not through sensation ⁷⁹ nor through opinion, inasmuch as during dreams we "conceive" (εἰκάζομεν) something other than the object—since in sleep we sometimes think (εἰκάζομεν) of another thing beyond phantasms (ἑνὸν τῶν φαντασμάτων) *(ἑνὸν τῶν φαντασμάτων)*,⁸⁰ Aristotle specifies:

It frequently happens, in fact, that persons seeking to remember what they have dreamed envisage some other image, apart from the dream, in the place where the images are received.⁸¹

Hence it is evident that not every phantasm in sleep is a dream and that what we think (οἴομαι) in this state is what we have previously accepted through opinion.⁸²

But whether the imagination and the sensitive part are identical in the soul or different, no dream occurs unless one sees and feels something⁸³

If, then, it is true that one sees nothing in the dream, it is not accurate to say that the sense faculty experiences nothing, but it is possible that sight and the other senses experience some affec-

⁷⁸ *Ibid.*, 3, 462a 18-19 sq.

⁷⁹ *Ibid.*, 1, 458b 9.

⁸⁰ *Ibid.*, 1, 458b 18: *ἑνὸν τῶν φαντασμάτων*

⁸¹ *Ibid.*, 1, 4t8b 23.

⁸² *Ibid.*, 1, 458b 24-25.

⁸³ *Ibid.*, 1, 458b 29-30.

tion. Each of the impressions acts in a certain way as though it were awakened, but not as though one were really roused.⁸⁴

And sometimes opinion tells us that what we see is false, as it tells those who are awake; at other times opinion is fettered by the image and goes along with it.⁸⁵

After this first analysis Aristotle concludes:

It is clear, then, that the experience (*ro IraOo*>) which we call dreaming does not belong to the opinionative or to the intellective faculty, or to the sensitive faculty, taken absolutely.⁸⁶

Hence one must make an appeal to the imagination:

Imagination is the movement engendered by sensation in act, and the dream appears to be a certain phantasm, since we call the dream the phantasm in sleep (*ro iv rf*>avmaJUL) either absolutely or in a special sense. **It** is clear that the dream belongs to the sensitive faculty inasmuch as it is capable of phantasms.⁸⁷

Then, speaking about possible errors, the Philosopher cites certain facts. The approach of a fever, as also a certain emotional state of anger, can produce illusions:

The cause of these phenomena is that it is not according to the same power that one discerns what is chief (*Kp[vav ro Kvpwv*) and that phantasms are engendered. The sign of this is that the sun seems to be a foot wide, whereas something else contradicts this impression.⁸⁸

Then the Philosopher specifies the conditions which favor the blossoming of images in contrast to those which do not favor this development:

Hence, just as in a liquid, if one agitates it very much, sometimes no image (*lt8wA.ov*) appears, sometimes a completely distorted image

⁸⁴ *Ibid.*, 1, 459a

⁸⁵ *Ibid.*, 1, 459a 6-7.

⁸⁶ *Ibid.*, 1, 459a 8 sq.

⁸⁷ *Ibid.*, 1, 459a 17 sq.

⁸⁸ *Ibid.*, 460b 16-18. And from what is said a bit further on, let us quote this statement: "In every case the appearance (*To #awoiJ.EPOP*) is there, but it does not seem real in every case, but only when the discerning faculty is restrained and lacks its own movement" (*Ibid.*, 3, 461b 5 sq.).

appears, so that the object seems quite different from what it really is, although when the liquid is no longer moving, the images are clear and visible; so also in sleep, sometimes the images (*-ra cpavnI.up.a-ra*) and movement remaining from the waking hours and resulting from sensations are altogether cancelled when the movement in question is too great. Sometimes, however, the visions produced are terrifying and monstrous and the dreams are morbid, as occurs, for example, with the melancholic, the feverish, and the inebriated.⁸⁹

When calm returns, then certain discernments can be made.

Then Aristotle seeks to specify whereby we are conscious of appearances in dreams:

In sleep, if a person is conscious that he is asleep and if he takes account of the state which reveals the sensation of sleep, there is an appearance (*cf>a[v£-rat*), but there is something in him which tells him that, although it appears to be Coriscus, but is not Coriscus himself (since often, when one is sleeping, there is something in his soul which tells him that what appears (*-r6 cpav6p..£vov*) is a dream), whereas if he does not take account of the fact that he is asleep, there is nothing to contradict the imagination.⁹⁰

And the Philosopher concludes:

It is clear that what we say is true and that in the sensorial organs (*£v -rot<> aiu0IJIJpiot<>*) there are movements apt to produce images (*cf>av-raunKat*), if one tries attentively to remember what one experiences when one is falling asleep as well as when one awakes; sometimes, in waking up, one will discover that the images which appeared (*-ra cpaw6p..£va £t8wA.a*) in sleep are movements in the sense organs.⁹¹

⁸⁹ *Ibid.*, 8, 461a 14 sq. Here Aristotle uses the term *eti5w"ll.ov* translated into Latin as *effigies* or *simulacrum* (462a 12, 462a 16). This word, which is the source of our contemporary term "idol," implies an idea of confusion which is apt to deceive. *.Pav-ra.tr.ua.*, which designates the fruit of imagination, does not imply the idea of trouble. *EtKwv*, used in the *Poetics*, comes from *lotKa*. (to be similar) and indicates the resemblance of what is relative to some other thing. These three words correspond to what appears (*q.a.lvw*) immediately, whereas *vtr0"A.r.f:ts* is the act of taking from below, as though one grasped something beyond that which appears in its regard.

•• *Ibid.*, S,

-1 *Ibid.*, S,

Hence" the dream is a sort of image (cf)(l.vTaap.an) occurring in sleep, since the appearances (eZ8cuA.a) concerning which we have just spoken are not dreams,"⁹²

Finally, in the treatise *On Divination in Sleep*, we must note these observations from Aristotle:

But in truth it is not unreasonable to suppose that some of the representations (cpavraap,anov) occurring during sleep are the causes of actions proper to each one of us.⁹³

It is possible for the movements which take place during sleep to be principles of actions accomplished during the day, inasmuch as the thought (8tavota) of these actions has already been prepared in the nocturnal phantasms (Ev cf>avTaCTfiacn

.⁹⁴ Hence it is possible that certain dreams be signs and causes.

Furthermore, as regards the interpretation of dreams, Aristotle observes:

The most skillful interpreter of dreams is the man who can recognize likenesses (ra> op,otorlJra>). . . I say likenesses, since phantasms (ra cpavraap,ara) are a bit like representations of objects in the water (rot> W ro!> il8amv dllwAm>).⁹⁵

So that, if the movement of liquids is violent, the representation (lp,cpaat>) is not at all like the original and the images (ra £i8w.Aa) do not resemble their models.⁹⁶

The role of the image, then, appears to be essential to this particular state of sleep; but imagination and dreams must not be identified on the basis of this observation.

e) *Imagination and Man's Emotions.*

In the *Rhetoric* Aristotle constantly underlines the role of imagination in reference to the emotions, and particularly as regards pleasures. Let us quote certain texts here:

⁹² *Ibid.*, 8, 462a 16-17.

•• *On Divination in Sleep*, 1, 463a 21 sq.

•• *Ibid.*, 1, 463a 29-80.

•• *Ibid.*, 2, 464b 5 sq.

•• *Ibid.*, 2, 464b 10 sq.

Since the experience of pleasure is in the sensation of a certain emotion (m8ou>), and imagination is a feebled sensation, it follows that when a person remembers and when he expects, he produces a sort of image (cf>avracr[a n>) of what he remembers and of what he expects.⁹⁷

From another aspect,

The opinion of others towards us feeds our imagination, and this makes us believe that we are fine fellows. "Honors and good repute are among the most pleasant things, because everyone imagines that he has the qualities of a fine fellow."⁹⁸

In what is most intimate to us, imagination produces an image of ourselves which gives us pleasure. As a result, a man likes to imagine his superiority over others:

Victory is pleasant, not only for the ambitious, but for everyone, inasmuch as an image of superiority is produced, which all persons desire with more or less eagerness.⁹⁹

Imagination can augment the pleasure of friendship by giving us a greater consciousness of our goodness:

It is pleasant to love (r6 cpi\E'iv) • • • just as it is pleasant (to be loved (r6 cpi\EZO"8at), since the imagination then makes us discover that we possess the good which all persons desire ... to be loved by a friend is to be an object of affection in and by oneself.¹⁰⁰

Imagination can also augment our pleasure by making us dwell interiorly upon the thought of revenge:

A certain pleasure follows upon anger for the reason given (the hope of revenge) and because man passes his time in the thought (rfi 8wvo[q_); hence the imagination in exercising itself causes us pleasure (ywopiVYJ cf>avrav[a ip:rrotEZ) as it does in dreams.¹⁰¹

⁹⁷ *Rhetoric*, I, 11, 1370a 27-30. Cf. also *Rhetoric*, II, 5, 1383a 17: "in such a way that hope follows upon the representation (l'eTa <f;avra<llas) of thmgs which can save us inasmuch as they are near."

•• *Ibid.*, I, 11, 1371a 8 sq.

•• *Ibid.*, I, 11, 1370b 32 sq.

¹⁰⁰ *Ibid.*, I, 11, 1371a 17 sq.

¹⁰¹ *Ibid.*, II, 2, 1378b 7-9.

This connection with anger is also asserted in the *Ethics*.¹⁰²

Imagination can exalt us in giving us an exalted image of what we are, but it can also put us in a state of shame as regards ourselves: "since shame (7] *ala-xvli'YJ*) is an imagination about dishonor (1rep"i d8offa.)."¹⁰³ It can also put us into a state of fear and trouble:

Let us admit that fear is a certain pain or trouble caused by the imagination (tK ,*Pavraa-Eac*;) concerning a future evil capable of destroying us or making us experience pain, since not all evil things are an object of fear.¹⁰⁴

Given this very important role of imagination as regards the emotions, we understand how it can be the occasion for a lack of prudence and a lack of self-mastery and hence become a great obstacle to virtue:

It is especially persons who are quick-tempered and of melancholy disposition who manifest this very impetuous absence of self-control; the former by following their impetuosity, the latter by force of their impressions, shut themselves up anew against reason (8ul. u£o8p11TYfTa ovk avap.Evovatv tov Aoyov)' since they follow their imagination.¹⁰⁵

Aristotle reminds us that the beasts do not lack control over themselves inasmuch as it is impossible for them to conceive the universal (ovK TWV Ka()6X.ov {.m6X.11/Jw)'but they possess only the imagination and memory of particular things (dx.Aa TWV Ka ()' Eku<J"tu .l. , f-tVYJf-tJV' ,¹⁰⁶

If imagination plays a very important role as regards our emotional life, our virtues in their turn act upon our imagina-

¹⁰² - The *M-yos* or imagination has shown him that there was outrage or disdain; and anger flares up immediately, as though it had concluded as a result of reasoning (*o-vXXo-yto-ap,evos*) that one must start a war against the adversary. By contrast, as soon as the *M-yos* and the *aro-IJ'I*o-ts have indicated an agreeable object, desire (*I-rn!Jvp,la*) flings itself out towards enjoyment" (*Ethics to Nicomachus*, H, 7, 1149a 32).

¹⁰⁸ *Rhetoric*, II, 6, 1384a 23.

¹⁰. *Ibid.*, II, 5, 1382a 23.

¹⁰⁵ *Ethics to Nicomachus*, H, 8, 1150b 28.

¹⁰⁶ *Ibid.*, H, 5, 1147b 4-5. Aristotle has just distinguished *ltn!Jvp,la* from

tions,¹⁰⁷ inasmuch as man has a certain power over his imaginations.¹⁰⁸ That is why imagination can be deemed to be, as it were, engendered by thought, as it is normally engendered by sensation.¹⁰⁹ This indicates a new type of cooperation between imagination and the intellect.

f) *Imagination and the Will.*

Imagination can act not only on the emotions but also on the will. As regards the will, the imagination also plays an important role, inasmuch as it presents the apparent good: $\tau\omicron$ *cpaw6flEvov &:ya06v*.¹¹⁰ Let us cite this particularly significant text:

We see that what moves the animal is thought (*8t&vma*), imagination, choice, the will (f3ouA.7Jat), the appetite (*i1rdJvp.lav*). All of these are reduced to the *vov*> and desire, inasmuch as the imagination and sensation have the same horizon (*xwpav*) as the *vov*>.¹¹¹

This last statement should be understood in the perspective of the treatise *On the Motion of Animals*.

g) *Imagination Can Be a Source of Opposition to Realistic Knowledge.*

We have already seen how imagination can cooperate in intellectual knowledge; but we must note also that imagination, achieving a knowledge as irreducible to sensation as to opinion, can be at the source of an anarchical knowledge which is in opposition to the discernment of the senses and the intellect.

¹⁰⁷ Cf. *Eudemian Ethics*, B, 1, 1219b 24: "The imaginations of virtuous men are better."

¹⁰⁸ Cf. p. 24 *supra*.

¹⁰⁹ Cf. *The Motion of Animals*, 8, 702a 19: "In fact, the organic parts dispose the passions harmoniously and suitably, whereas imagination makes the apt disposition for desire. But the latter is engendered either by thought or by sensations."

¹¹⁰ Cf. *Eudemian Ethics*, B, 1, 1235b 26: "the apparent good for some is the object of opinion, for others it is the object of imagination, although it may not be the object of opinion." Cf. also *The Motion of Animals*, 6, 700b 28: $\tau\omicron$ <f>*av6p.evov ti'Ya86v*.

¹¹¹ *The Motion of Animals*, 6, 700b 17.

We can examine only what appears, without taking account of the discernment of knowledge which attains the real.¹¹²

In this way the imagination can be a source of error.¹¹³ In the treatise *On Dreams*, as we have already indicated, Aristotle observes that this propensity to error is manifested in the fact that, "just as the sun seems to be a foot wide, frequently some other thing contradicts the imagination."¹¹⁴

h) *Imagination and Art.*

We observe first that Aristotle stresses the chief role of imagination in his *Rhetoric*: "In Rhetoric everything depends upon the imagination, and this has the hearer in view."¹¹⁵ Now we know that, for the Philosopher, rhetoric is an art ordered to persuasion (*To Tt0av6v*), and that this appears in that discourse which produces the emotional experience.¹¹⁶ Here, then, we have a very clear expression of the cooperation between imagination and discourse

Furthermore, this is not proper to the art of rhetoric, inasmuch as every art seems to be the fruit of a very special

¹¹² In his treatise *On the Heavens*, II, 13, 294a 7, concerning the circular form of the earth, Aristotle notes that one must not confuse what one knows about reality in its appearance and what one knows about reality in itself. Cf. also II, 14, 31, as well as *On the World*, 395b 6; *Meteorologica*, I, 5, 342b 32; 3, 339a 35; *On Sophistical Refutations*, 4, 165b 25; 6, 168b 7-8; *Topics*, I, I, IOOb 21.

¹¹³ *Meteorologica*, II, 9, 370a 15. Since imagination is a source of error, imagination has come to be identified with illusion as error. G. Canguilhem writes: "The imagination is non-perception. It is the perception of some object other than its authentic object. . . . There is no empty consciousness, deprived of an object, and perception concerns all instants. But sometimes perception is right, sometimes it is wrong; it is imagination in the latter case. The imagination is thought always having a content but capable of establishing an object for itself which differs from that through which it is aroused. Hence to imagine is to live an effective and correlative behavior concerning an object which differs from the real object." And G. Canguilhem cites Alain (*Systeme des Beaux-Arts*, p. 18): "Disorder in the body, error in the spirit, one nourishing the other, that is what is real for the imagination."

(G. Canguilhem, "La creation artistique selon Alain," in *Revue de Meta-physique et de morale*, LVII, no. 2 [avril-juin, 1952], pp. 176-77).

¹¹⁴ *On Dreams*, 460b 19.

¹¹⁵ *Rhetoric*, III, 1, 1404a 11.

¹¹⁶ *Ibid.*, I, 1, 1356a sq.

cooperation between the mind and imagination, between the *A.δyos* and phantasms.

Aristotle does not speak explicitly about imagination in his *Poetics*; but in showing (in the *Rhetorics*) the importance of the image (*ελκωv JLETαcοpα*) in poetry¹¹⁷ and of the fable (myth) in tragedy,¹¹⁸ and in speaking about the imitative art, he thereby clearly indicates the chief role of imagination. However, he also indicates the chief role of the mind; poetry is more philosophical and has a more elevated character than history, inasmuch as poetry speaks of things in a rather universal way (nl. *Kα06A.ov*), whereas history speaks about things "according to what is particular."¹¹⁹

As regards imitation, Aristotle stresses the fact that "the tendency to imitate is instinctive to man from childhood."¹²⁰

It is by imitation that he acquires his first lessons and all men experience pleasure through these lessons. The sign of this is furnished by the facts: we pleasurably contemplate the most faithful images (*ρ?is δK6va>*) of real objects which we cannot look at directly without pain, as, for example, what concerns the most repulsive beasts and corpses.¹²¹

There is need to specify the precise bonds existing between phantasms and images or fables in order to grasp better the cooperation between the imagination and the intellect in art. What is evident is that every image and every fable presupposes a phantasm, a representation. Yet all intellectual knowledge, too, presupposes a phantasm and cannot be produced without a phantasm.¹²² What characterizes the art of

¹¹⁷ Cf. *ibid.*, III, 4, 1406b 20. There is between *ελκωv* and *φ.τεΤα</>οpα* a slight difference (*ηιτα</>εpet ηL<Kpδv*): "when it is said that Achilles rushed like a lion, that is an image; on the contrary, 'this lion rushed' is a metaphor."

¹¹⁸ *Poetics*, I, 6, 1460a 4: "A myth is the imitation of an action; by myth I mean the synthesis of actions."

¹¹⁹ *Ibid.*, I, 9, 1451b 5 sq.

¹²⁰ *Ibid.*, I, 4, 1448b 5 sq.

¹²¹ *Ibid.*, I, 4, 1448b 7 sq. See our study *L'art imite la nature* in *L'activite artistique*, II (Paris, ed. Beauchesne, 1970), p. 305 ff.

¹²² On this matter let us cite this passage from C. Canguilhem very significant of recent theories concerning the imagination which are directly opposed to Aris-

imitation is that it uses the phantasm to make an image or fable from it. Hence we are in the presence of an exemplary-Image.

* * * * *

At the end of this study, it appears quite clear that Aristotle has not scorned the role of imagination in human life, both intellectual and affective; this is a consequence of his realism and his philosophical conception of the substantial union between soul and body.¹²³ Although he has seen the full importance and richness of the imagination, he has also understood its dangers. But he has not been content to describe and situate the various functions of imagination in our life; he has sought to specify what it is, the special type of knowledge it presents, an especially difficult task in view of the extremely fluctuant, mobile, and poorly determined character of the imagination. Is it not the least determined knowledge

title: "Sartre, who also knows sufficiently well what he owes Alain on this point, traces to Descartes, before Hume, that conception of the mental image which makes of it an impression of things in thought, an object in the mind, a card in an album. Personally it seems to me that Sartre has not gone back far enough in his research concerning the responsibilities anent the matter of this conception of the image, imitation and presence, something which he refuses to do along with and after Alain. For, finally, it is Aristotle who holds that imagination is a theoretical power without its own productive activity, its role being only to furnish a content for rational thought. If imagination plays a role in art, it is by its function as an instrument of knowledge, by its logical function " (*Art. cit.*, p. 176).

¹²⁸ It has even been so much as said that the imagination was " the principle of the form and the end (final cause) which unites all the parts of Aristotle's system in his conception of the universe" (Froschammer, *Ueber die Principien der Aristotelischen Philosophie und die Phantasia in Derselben* [Munich, 1881], p. 108). And the author of this book in which the imagination, a divine faculty, is the creator of the universe, God being the artist and the world a work of art, adds: " When we reach the point of specifying the action of the imagination in the objective and subjective sense as principle of unity for the conception of the universe as held by Aristotle, it is not a matter of merely explaining what Aristotle himself holds and explains with his customary precision, but also that which remains non-developed in his writings and which is offered as a consequence, or that which remains at the base as a supposition." Citing this passage in his *Esthetique d'Aristote et de ses successeurs*, Ch. Benard comments: "It is clear that with this method one can cause the philosophy of Aristotle to be delivered from a Muse who will be the Imagination itself two thousand years after the Stagirite" (p. 879).

precisely because it no longer looks at what is real, is not specified by a proper object? Is it not the most mobile and dynamic knowledge, the knowledge wherein the *self-movement* (*se movere*) is achieved in the clearest and most exclusive way, inasmuch as it is a *self-movement* (*se movere*) without finality? Therefore Aristotle first seeks to distinguish imagination, on the one hand, from opinion, and, on the other, from sensation, in order to show us how imagination, on the one hand, does not attain the most imperfect knowledge of the *vous*, and, on the other, remains a sense knowledge, yet mediated by another sense knowledge; it is a second sense knowledge. That is why it can be considered to be either a weakened sensation or a more developed sense knowledge. In fact it is both. From the qualitative point of view and the aspect of qualitative determination, it is surely a weakened sensation; and from the aspect of autonomy it is surely a more vital, more immanent, and more perfect knowledge, inasmuch as it prolongs sense knowledge from the viewpoint of representation.

Thus, for man, it is at the apex of sense knowledge and disposes him for rational knowledge; hence it is essentially intermediary, enabling him to unite contraries. Given this position of intermediary, the very important role which it plays in the whole of human life, very specially in affective life and artistic life, can be understood. The phantasm then becomes the image, the myth, the part of reality the intellect can imitate, the manner whereby it reconstructs the universe in it. Imagination, then, permits a certain synthesis of the intelligible and the sensible, the universal and the singular.

Thus we see how we can consider imagination either as an intermediary between sense knowledge and intellectual knowledge (if we examine it in itself, and this is what Aristotle mainly does), or as a synthesis of these two types of knowledge, if we examine it in its artistic function, and this is what Plato mainly does.

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ANIMAL INTELLIGENCE AND CONCEPT- FORMATION

ON READING Dr. Mortimer Adler's assessment of *The Difference of Man and the Difference It Makes* about a year ago, I was excited by Mr. Adler's remark at one point that Peter Geach, in a book entitled *Mental Acts*¹ had convincingly shown that "human concept-formation ... does not consist in a process of abstraction at all."² Like most other philosophers, I had often wrestled with the difficulties and perplexities surrounding the various theories of human understanding, so it will not be difficult to understand my enthusiasm on being alerted to a work which promised to show why Locke was wrong in holding that "he that thinks general names or notions are anything else but abstract and partial ideas of more complex ones, taken at first from particular existences, will ... be at a loss where to find them."³ Accordingly, I picked up a copy of Mr. Geach's book at my first opportunity, disposed to discover therein the long-standing oversight or confusion which had led so many philosophers to look on ideas as the result of some sort of abstractive process.

The following pages, then, may be read either as a critical response to Mr. Geach's presentation, or as an expression of the disappointment I experienced in terms of what Dr. Adler had led me to expect. I also hope, beyond this, that the following pages may be of some interest and illumination to other philosophers in their own assessments of this historically complex and philosophically difficult topic. A Structural Outline is given below.

¹ Peter Geach, *Mental Acts. Their Content and their Objects* (London: Routledge & Kegan Paul, 1957), pp. 131 with Bibliography and Index.

² Mortimer J. Adler, *The Difference of Man and the Difference It Makes* (New York: Holt, Rinehart & Winston, 1967), p. 187, reference to fn. III on p. 817.

• John Locke, *Essay Concerning Human Understanding*, Book III, par. D.

STRUCTURAL OUTLINE

- I. The Logical Structure of an Historical Controversy-p. 44.
- II. The Construction of Mr. Geach: Aquinas in Caricature--p. 45.
- III. The Achievements of Sense and Their Relation to Concept-Formation in Man According to Aquinas--p. 55.
 - A. Rational processes and animal intelligence--p. 56.
 - B. The traditional language of faculties-p. 59.
 - C. The Notion of *vis aestimativa* and of *experimentum*-p. 60.
 - 1. The levels or grades of sensitive life--p. 61.
 - 2. The third or highest level of sensitive awareness--p. 64.
 - 8. Textual difficulties--p. 67.
 - 4. Resolution of difficulties: the synonymy of *vis aestimativa* and *experimentum*--p. 70.
 - D. The accidental and the essential universal-p. 72.
 - E. The proper contrast between animal intelligence (*vis aestimativa*) and the perceptual roots of concept-formation in man (*vis cogitativa*)-p. 77.
 - F. The sphere of animal consciousness and the world of human awareness--p. 79.
 - G. Rational processes and animal intelligence: summary restatement-p. 81.
- IV. Aquinas and Mr. Geach: A Study in Parody-p. 84.
 - A. The problem of particular judgment--p. 85.
 - B. The role of the *intellectus agens* in concept-formation-p. 86.
- V. Conclusion: Toward the Roots of the Caricature--p. 88.

I. *The Logical Structure of an Historical Controversy.*

There are, as everyone knows, a relatively small number of major issues in philosophy which are decisive in that the position one takes with respect to them determines everything else one may consistently contend about man and the world.

One such fundamental issue is the problem of the sense of the distinction between mind and body and the nature of the relations that obtain between the terms of this distinction. According to one school of thought the principles necessary and sufficient for settling this issue are to be found in the writings of Aristotle, particularly as interpreted and developed by Aquinas. Thus, as W. I. Matson points out in a perceptive and scholarly presentation of "Why Isn't the Mind-Body Problem Ancient?", "from Homer to Aristotle, the line be-

tween mind and body, when drawn at all, was drawn so as to put the processes of sense perception on the body side." " Within this perspective Aquinas was subsequently able to make clear that there are only two alternatives to the hylomorphic doctrine on the soul insofar as it relates to any question of mind and body, namely, an idealistic or dualistic doctrine denying any mutual dependence of mind and body, or, on the other hand, a materialistic doctrine asserting that bodily processes can explain equally and fully both intellectual or conceptual acts and sensory or perceptual ones. Either intellect differs from sense in kind but in such wise that the former depends on the latter for the derivation and elaboration of its own proper notions (Aquinas's interpretation of Aristotle); or the intellect differs in kind from sense without depending thereon in the derivation-though perhaps in the elaboration-of its proper notions; or the intellect is dependent on sense in such wise that there is not even a fundamental difference in kind between them, and what accounts for sensory perceptions suffices in principle to account for intellectual conceptions.

II. *The Construction of Mr. Geach: Aquinas in Caricature.*

Now what does Geach tell us in his analysis of *Mental Acts* that further clarifies and illustrates the consequences of these fundamental options? It is an interesting mixture. He tries to combine the consequences flowing from Aquinas's position with the fundamental tenet that intellect differs in kind from sense without depending thereon in the derivation of its proper notions. One might have thought that this was just Mr. Geach's way of being "ecumenical" and bringing diverse traditions into a mutually stimulating contact (although in the end any such merger of the fundamental dialectical options or "logical possibilities" envisionable in terms of a basic philosophical problem is bound to end in ruin for all concerned).

I. Matson, "Why Isn't the Mind-Body Problem Ancient?" in *Mind, Matter and Method*, ed. by P. K. Feyerband and G. Maxwell (Minneapolis: University of Minnesota Press, 1966), p. 101.

But Mr. Geach goes out of his way to obviate this courteous interpretation by appending to his book an "Historical Note" on "Aquinas and Abstractionism,"⁵ wherein he assures us that not only does he think that intellect differs irreducibly in kind from sense in such a manner as to be quite independent thereof both for the formation and exercise of concepts, but that "it can be decisively shown that in his maturest work, the *Summa Theologica*, [the] views [of Aquinas] are opposed to what I have called abstractionism."⁶ This "decisive historical note" accomplishes its stated aim by reference principally to I, q. 79, a. 3, ad 2, and I, q. 85, a. 2, ad 3. It is this "historical note" that I want now to examine.

The justice of Geach's interpretation depends on the answer that must be made to the following questions:

- 1) What is it that Geach calls "abstractionism" ? (p. below)
- 2) Is the thought of St. Thomas as it can be found in his "maturest work" opposed to what Geach calls abstractionism? (pp. - below) This question is itself a complex which I shall break down into three points:
 - a) Can the *Summa* be called simply Aquinas's "maturest work" ? (pp. below).
 - b) Does Aquinas express an anti-abstractionist view regarding the formation of concepts in I, q. 79, a. 3, ad 2, as Geach alleges? (pp. below)
 - c) Does Aquinas express an anti-abstractionist view on the "exercise," i. e., the elaboration and application, of concepts in I, q. 85, a. 2, ad 3, as Geach alleges? (pp. below)

Let us consider each of these questions in turn.

I) What does Geach mean by abstractionism? He says:

I shall use "abstractionism" as a name for the doctrine that a concept is acquired by a process of singling out in attention some one feature given in direct *experience-abstracting* it-and ignoring

⁵ Geach, *op. cit.*, "Appendix," pp. 180-181.

⁶ *Ibid.*, p. ISO.

the other features simultaneously *given-abstracting from* them. The abstractionist would wish to maintain that all acts of judgment are to be accounted for as exercises of concepts got by abstraction. ⁷ My own view is that abstractionism is wholly mistaken; that no concept at all is acquired by the supposed process of abstraction. ^{7a} --- I shall try to show that the whole idea of abstraction-of discriminative attention to some feature given in experience-is thoroughly incoherent. ⁸

2) The next question is whether the thought of St. Thomas in his maturest work is opposed to abstractionism as just outlined. We proceed by way of three points.

a) What is involved in Geach's singling out of the *Summa* as Aquinas's "maturest work" ? If one means by this that the *Summa* is the longest of Aquinas's works which does not develop principally as a *Commentarium* on someone else's writing and that it is from the latter period of Aquinas's life (1266-1273), then no exception can be taken to this reference. On the other hand, if one intends to use this phrase as a device for sharply separating the thought of the *Summa* from the rest of Aquinas's writings as being what he "really and finally thought" -the mature as opposed to the other writings-so that only the expressions of the *Summa* finally "count," from a genetic point of view, then the reference is simply a subterfuge for impoverished interpretation. The period in Aquinas's life from 1266-1273, for example, also dates the composition of *In III libros de anima*, *In XII libros metaphysicorum*, *In II libros post. anal.*, among other works, so that, from a chronological and genetic point of view and for purposes of interpretation, these works are on an equal footing with the *Summa* insofar as "maturity" is at issue.⁹

b) Geach comments on I, q. 79, a. 3, ad 2 as follows:

⁷ *Ibid.*, p. 18.

^{7a} *Ibid.*

• *Ibid.*, p. 19.

• Cf. E. Gilson, *The Spirit of Medieval Philosophy* (New York, 1940), pp. 424-425; M.-D. Chenu, *Toward Understanding St. Thomas* (Chicago: Regnery, 1964), *passim*.

In accepting the comparison whereby the *intellectus agens*, the mind's concept-forming power, is likened to a light that enables the mind's eye to see the intelligible features of things, as the bodily eye sees colors, Aquinas is careful to add that this comparison goes on all fours only if we suppose that colours are generated by kindling the light—that the light is not just revealing colours that already existed in the dark.¹⁰

From this it is supposed to be plain that the view of Aquinas on the formation of concepts in the *Summa* is anti-abstractionist.

In point of fact, the Reply in question has little bearing on the problem of abstraction. Aquinas is discussing in q. 79 the intellectual powers of the soul, after having shown in the previous question that sense and intellect, generically considered, differ in kind as powers. Having shown in art. 1 of q. 79 that the intellect is a power, and in art. 2 that it is in a condition of potentiality with respect to the intelligibility of things, Aquinas proceeds in art. 3 to discuss whether there must be a cause distinct from the things themselves which are understood to explain the passage of our understanding in a given case to a state of actual understanding; and he points out that our answer to this question is principally determined by the position we adopt concerning the forms of natural things. If we say, like Plato, that the forms of themselves subsist apart from matter, it will follow that they are of themselves in a state of actual intelligibility, and in this case there is no need for an active cause for understanding, except perhaps in some secondary way and by reason of a concomitant attribute.¹¹

On the other hand, if we are of like opinion with Aristotle on the question of natural forms and regard them as existing actually only in a sensible way and in strict dependence on matter insofar as they are within the subsistent, the individual that exists as a part of nature, then it will be necessary to posit an active cause of understanding which essentially, and not

¹⁰ Geach, *op. cit.*, p. 130.

¹¹ See *Summa Theol.*, I, 79, a. 4; q. 84, a. 6.

just incidentally, accounts for the actualization of our understanding in any given case. On the Aristotelian view there is no need for a *sensus agens* because sensible things are found in a state of actuality-not indeed as sensed but as things¹² existing independently of the soul; similarly, on the Platonic view, there is no need for an *intellectus agens* because intelligible things are found actually as such existing independently of the soul. But since in the Aristotelian view intelligible things are found to be such only in a state of potentiality-not indeed as understood but as things-it is necessary to admit the necessity of an *intellectus agens*.

The intelligible as such is not something which can be found existing in the physical world. And therefore our understanding of nature could not be accounted for simply by the fact that our intellect is immaterial, were there not also an active aspect of intelligence which caused the non-subsistent sensible forms to exist in knowledge as though they were subsistent, i.e., able to exist as such apart from matter-qui faceret intelligibilia actu per modum abstractionis.¹⁸

Now what in Geach's comment bears on any of these points, which cover q. 79, a. 3, objs. 1 and 3, *corpus*, and ad 1 and 3? Let us now bring into account the reply to obj. 2, on which alone Geach rests his case that Thomas propounds an anti-abstractionist view. The second objection states that, if you are going to argue for the existence of an *intellectus*

¹² - Res faciens passiones in sensu non est ipsemet sensus, quia sensus non est suimet, sed alterius, quod oportet esse prius sensu naturaliter. . . . Et si contra hoc dicatur quod sensibile et sensus sunt relativa ad invicem dicta [prout sensibilia in actu non sunt sine sensibus, i. e., animalibus], et ita simul natura, et interempto uno interimitur aliud; nihilominus sequitur propositum; quia sensibile in potentia non dicitur relative ad sensum [sicut e contra intelligibile dicitur relative ad intellectum] quasi ad ipsum referatur, sed quia sensus refertur ad ipsum." (*In IV Met.*, lect. 14, nn. 706-707).

¹³ *Summa Theol.*, I, q. 79, a. 3, ad 3: "Intelligibile autem in actu non est aliquid existens in rerum natura, quantum ad naturam rerum sensibilibus, quae non subsistunt praeter materiam. Et ideo ad intelligendum non sufficeret immaterialitas intellectus possibilis, nisi adesset intellectus agens, qui faceret intelligibilia in actu per modum abstractionis."

by analogy to the function light performs in making sight possible, then the conclusion will not hold up. For, in the case of seeing, there is a medium involved, and light functions not to make things potentially colored to be so actually but only to render the medium luminous, whereupon the actually colored things as colored are able of their own nature to cause vision. But since there is no similar medium involved in the case of understanding, there is no ground for postulating an *intellectus agens* which functions in understanding as light functions in seeing.

St. Thomas's reply to this is simply to point out—as indeed is clear in the light of the rest of the article of which Geach omits mention—that no one was trying to argue to the necessity of an *intellectus agens* from an analysis of the way that light does or does not function in making colored things visible but from the intrinsic requirements of the structure of understanding and of the passive intellect. For this argument the precise function light plays in seeing is irrelevant, so much so that, even if the particular view stated in the objection should be correct, it would not affect the analogy between the *intellectus agens* and light but only the reason for which one might employ this particular metaphor. In Geach's terms, the point of I, q. 79, a. 3, ad 2 is that, if we suppose "that colours are generated by kindling the light,"¹⁴ then Aristotle's comparison of the *intellectus agens* to light is verified in that the *intellectus agens* is required for understanding just as light is required for seeing and in the same way as light is required for seeing; on the other hand, if we suppose "that the light is . . . just revealing colours that already existed [actually] in the dark,"¹⁵ then Aristotle's comparison still holds inasmuch as, just as the *intellectus agens* is necessary for understanding, so also light is necessary for seeing, although the reason for the necessity is no longer formally the same in the two cases. The only thing which Aquinas "is careful to add" in "accepting the

¹⁰ Geach, *op. cit.*, p. 180.

¹¹ Ibid.

comparison whereby the *intellectus agens*, the mind's concept-forming power, is likened to a light that enables the mind's eye to see the intelligible features of things, as the bodily eye sees colours,"¹⁶ is that the comparison does not depend entirely on a particular theory of the function of light!

There are two opinions current to explain the function of light with respect to seeing. Some hold that light is essential to sight in the sense of actually making colors to be visible; and if this view is correct, it would follow that the *intellectus agens* is required for understanding in a manner strictly analogous [similiter requiritur, et propter idem] to the manner in which seeing requires light. But others contend that this is not the role which light plays when we see things. Light is not necessary for colors to be actually visible but is required merely in order that the medium might become luminous. Such, for example, is the view expressed by Averroes in par. 67 of his *Commentary* on the *De anima*; and if this is the correct view, then the comparison whereby Aristotle likens the *intellectus agens* to light would not hold strictly [non propter idem] but only in the respect that, as light is necessary for seeing, so the *intellectus agens* is necessary for actual understanding.U

In summary, the text in I, q. 79, a. 3, ad 2 has little bearing on the problem of abstraction; and the article as a whole is not directly concerned with how concepts are formed but with whether we must assign on the part of the intellect, in addition to a potentiality with respect to the intelligibility of things, some power to make things actually intelligible. The answer to this is Yes, and Aquinas does add that this *intellectus agens* operates "per modum abstractionis"; but

¹⁶ *Ibid.*

¹⁷ *Summa Theol.*, I, q. 79, a. 3, ad 2. "dicendum quod circa effectum luminis est duplex opinio. Quidam enim dicunt quod lumen requiritur ad visum, ut faciat colores actu visibiles. Et secundum hoc, similiter requiritur, et propter idem, intellectus agens ad intelligendum, propter quod lumen ad videndum. Secundum alios vero, lumen requiritur ad videndum, non propter colores, ut fiant actu visibiles; sed ut medium fiat actu lucidum, ut Commentator dicit in II *de Anima*. Et secundum hoc, similitudo qua Aristoteles assimilat intellectum agentem lumini, attenditur quantum ad hoc, quod sicut hoc est necessarium ad videndum, ita illud ad intelligendum; sed non propter idem."

the question as to the nature of abstraction is only dealt with as it touches on his major concern, which is not to show in what sense the comparison between the *intellectus agens* and light "goes on all fours" ¹⁸ but rather to show, if anything, that whether the comparison goes on all fours or some other way is strictly irrelevant to the question of "whether there is an *intellectus agens*."

Actually, the text which Geach cites with regard to the "exercise" of concepts says a good deal more on the question of just how concepts are formed than does I, q. 79, a. 8, ad 2, which is the least relevant passage to the subject of Geach's discussion in the entirety of art. 8. Let us therefore turn to this second text and see how it bears on Geach's argument. We will then be in a fair position to pass judgment on the justice of Geach's historical note.

c) Not only does Aquinas say, according to Geach, that, if we wish the likening of the *intellectus agens* to light to go on all fours, we must adopt the opinion that colors are generated by kindling the light:

Furthermore he says that when we frame a judgment expressed in words, our use of concepts is to be compared, not to seeing something, but rather to forming a visual image of something we are not now seeing, or even never have seen (Ia, q. 85, art. 2 ad 3 urn). So he expresses anti-abstractionist views both on the formation and on the exercise of concepts.¹⁹

Geach seems to infer here that, since St. Thomas affirms that a sensory experience does not lie at the base of everything we can put into words, obviously our employment of concepts cannot depend on an abstractive process. Let us situate his commentary in the context of the question with respect to which the objection St. Thomas is answering arises.

Question 85 treats of the manner and order according to which human understanding develops itself. Having treated

¹⁸ Geach, *op. cit.*, p. 130.

•• *Ibid.*

in art. 1 the question of whether our intellect understands the world through a process of abstraction from sensory experience, St. Thomas goes on in art. 2 to treat of the problem of whether the intellect is related to its concepts in such wise as to have them for its immediate object or only in such wise as to know existing things directly through the medium of concepts, which are therefore known to exist only reflexively and never as such. The third objection against the thesis that concepts are not as such the objects of understanding states that, since words, as the expression of what we understand, express concepts, it would seem to follow that therefore concepts as such are the objects of our understanding. In reply to this objection Aquinas writes as follows:

There are two aspects to the cognitive operation which goes on in the sensitive part of the soul. One aspect involves a passive undergoing of the actual influence upon the sensory powers of some object or other in the environment: it is under this aspect that the operation of sense is determined by being actually affected by some independent object [sensatio enim est actus sensibilis in sensu]. The other aspect involves an active constituting or formation, according as the sensory consciousness [vis imaginativa] forms or fashions for itself some image or mental picture of an object not physically present, or even of something never as such seen in the physical environment. Both of these aspects are likewise met with in the operation of the intellect. On the one hand, account must be taken of the influence according to which our understanding is actualized in one or another respect; and, on the other hand, account must be taken of the manner in which the intellect, once informed, is further able to fashion or elaborate for itself concepts, whether by defining, distinguishing, or synthesizing, which secondary concepts are what words signify. Thus spoken words do not signify the primary but rather the secondary aspect of concept formation, i.e., words signify concepts as the intellect has itself elaborated and related them for the purpose of discriminating the reality of things [ad iudicandum de rebus; exterioribus].²⁰

²⁰ *Summa Theol.*, I, q. 85, a. ad 8: "dicendum quod in parte sensitiva invenitur duplex operatio. Una secundum solam immutationem: et sic perficitur operatio sensus per hoc quod immutatur a sensibili. Alia operatio est formatio,

Now what about that first or primary formation, the aspect according to which the intellect is not active but passive in order to become active?

Nam *prima* quidem consideratur passio intellectus possibilis secundum quod informatur specie intelligibili, qua quidem formatus, format *secunda* vel definitionem vel divisionem vel compositionem, quae per vocem significatur . . . ad iudicandum de rebus exterioribus.²¹

What about these primary "species intelligibiles"? Are they abstractions for Aquinas or not? Geach leaves this question entirely out of his reference to the text he cites as exemplifying Aquinas's "anti-abstractionist views," and yet it is the very question which really has a bearing on what Geach alleges to be the case.

As a matter of fact, they are, for Aquinas, abstractions in the precise manner which Geach denies concepts ever can be, of "being able to recognize some feature we have found in direct experience";²² and in the precise sense, "thoroughly incoherent" according to Geach, of being possible only on the basis of "discriminative attention to some feature given in experience."²³

This is the very heart of Aquinas's teaching on the relations that obtain between sense and intellect, rooted in the distinction between the potential and the actual existence of a world of intelligible natures.

secundum quod vis imaginativa format sibi aliquod idolum rei absentis, vel etiam nunquam visae. Et utraque haec operatio coniungitur in intellectu. Nam primo quidem consideratur passio intellectus possibilis secundum quod informatur specie intelligibili. Qua quidem formatus, format secundo vel definitionem vel divisionem vel compositionem, quae per vocem significatur. Unde ratio quam significat nomen, est definitio; et enuntiatio significat compositionem et divisionem intellectus. Non ergo voces significant ipsas species intelligibiles; sed ea quae intellectus sibi format ad iudicandum de rebus exterioribus." See Jacques Maritain, *The Degrees of Knowledge*, trans. from the 4th Fr. ed. under the general supervision of Gerald B. Phelan (New York: Scribner's, 1959), Appendix I, "The Concept," esp. p. 395.

²¹ *Ibid.*

²² Geach, *op. cit.*, p. 40.

²³ *Ibid.*, p. 19.

Because our conceptual knowledge is derived from experience [as well as from discourse], Aristotle considered it to be fairly evident that our initial concepts must be formed on inductive grounds.²⁴

Now it is even more evident that properly and essentially speaking sensation is of the singular, but it must nevertheless be admitted upon analysis that there is an improper and incidental fashion according to which the upper levels of sensitive life are contiguous with the rudimentary achievements of properly intellectual life.²⁵ For if it were the case that the achievements of sensory awareness were restricted in every respect to particularities and in no way effected a structure of generalized categories transcending and organizing the individual encounters of day-to-day interaction, it would not be possible that some of our concepts should take their origin, as they do, in the apprehensions of sense.²⁶

III. *The Achievements of Sense and Their Relation to Concept-Formation in Man According to Aquinas.*

To understand what is at stake here, it is necessary to put to Aquinas this question: granted that sense and intellect differ fundamentally, so that the achievements of conceptual thinking are never reducible to the achievements of perceptual thinking, what are the highest achievements or organizational levels which sensory life is in principle capable of attaining, and what is the relation of these maximal attainments to the functionings of intellectual life at its own levels?

When one reads the works of Aquinas with this question explicitly in mind, one finds an aspect of his thought which deals comfortably with the question of how can there be an intellectual awareness of singulars, in sharp contrast to the tortured elaborations of this question which one usually asso-

"In II Post. Anal., lect. 20, n. 595: "Quia igitur universalium cognitionem accipimus ex singularibus, concludit manifestum esse quod necesse est prima universalia principia cognoscere per inductionem."

²⁵ *Ibid.*: "Manifestum est enim quod singulare sentitur *proprie* et *per se*, sed tamen sensus est quodammodo etiam ipsius universalis."

²⁶ *Ibid.*: "Si autem ita esset quod sensus apprehenderet solum id quod est particularitatis, et nullo modo cum hoc apprehenderet universalem naturam in particulari, non esset possibile quod ex apprehensione sensus causaretur in nobis cognitio universalis."

ciates with the scholastic tradition. Traditionally, philosophers speak of the contrast between universals and particulars when drawing the line between intellectual and sensory awareness; and in point of fact, there is a sense in which no one who successfully follows the discussion can deny that intellectual knowledge contrasts with sensory knowledge as a universal principle contrasts with a particular existent. This is the way Aquinas speaks, following a long tradition of Greek philosophy and commentary thereon both Latin and Arabic; and this is the way many philosophers still speak. I have no quarrel with the thought of Aquinas and those who follow him on this point; rather, I want to suggest why contemporary intellectuals, not only scientists but also philosophers, are legitimately confused by this way of expressing the distinction between sensory and intellectual knowledge; and then to suggest an alternate way of speaking which makes the same point while obviating most of the difficulties. In the course of this development I hope that the utter absurdity of Geach's historical claim (that the "mature Aquinas" was not an abstractionist) and also of his personal thesis (that the "whole idea" of abstraction is completely incoherent) will become a matter of common agreement between the reader and me.

A. *Rational Processes and Animal Intelligence.*

H. H. Price has well observed that in modern times "philosophers are not accustomed to considering a level of mental development at which cognition and action are not yet sharply differentiated, and a level, moreover, at which words are not used and even images can be dispensed with." ²⁷

Yves Simon, in a remarkable discussion of "freedom of choice as freedom of judgment," suggests a very good reason why this should be so. "If the question of animal intelligence in man is so poorly known, it is probably because it is very difficult to separate, even incompletely, the processes pertaining

²⁷ H. H. Price, *Thinking and Experience* (Cambridge, Mass.: Harvard, 1969!), p. 120.

to animal intelligence from the rational processes which penetrate them intimately." ²⁸

Even allowing this, which is certainly the case, it must still be said that the absence of consideration which Price remarks makes for a rather curious state of affairs. For the literature of ancient and medieval philosophy have many passages treating of just such a level of mental development as that to which Price refers. They even gave a name to the highest level of mental life prior to the possibility of speech and necessary as its precondition, calling it the *vis aestimativa* in animals and the *vis cogitativa*, sometimes *ratio particularis*, or even sometimes the *experimentum*, in man.

It is important for present purposes to note particularly the difficulty remarked by Simon to which these classical expressions bear witness, namely, the difficulty of separating, "even incompletely," the highest attainments of animal intelligence from the primitive attainments of human intelligence.

It must be acknowledged that with respect to the powers of apprehension, even as with respect to the powers of desire, there is something which belongs to animal life as fully consonant with its own ontological level, and something which belongs to it according as it has some measure of participation of rationality, reaching in its own highest attainments the levels which are the foundation of the higher attainments of intelligence at the level of human existence Just as imaginative capacities [*vis imaginativa*] belong to the animal soul according as it is a part of the order of sense (because in the imagination are preserved the experiences of things as sensed), so, by contrast, estimative capacities, by virtue of which the animal perceives something in terms of features not directly sensible, as when it reacts with friendliness or hostility to diverse objects, belong to the animal soul according as it has a communion with the order of intellect. It is by reason of this estimative capacity that animals are said to have a kind of foresight or prudence, i.e., by reason of the fact that they are able to modify their behavior in the light of past experience. ²⁹

²⁸ Yves Simon, *Freedom of Choice* (New York: Fordham, 1969), pp. 111-112.

"*De Veritate*, q. 25, a. 2, par. 4: "Sciendum est . . . quod tam ex parte apprehensivarum virium quam ex parte appetitivarum sensitivae partis, *aliquid*

From this it is apparent how serious an error it is to translate *vis aestimativa* as "instinct" and to contrast the *vis aestimativa* with the *vis cogitativa* as what is wholly innate and fixed with what is flexible and indetermined in operation by its association with reason, i. e., by existing in a human being.³⁰ This is to mistake the estimative capacities of a particular range of animal forms for the estimative capacity of the animal soul considered in itself. It is to confuse the *de facto* with the *de jure* and to substitute the part for the whole. As Professor Price has so well said,

It is a mistake to suppose that there is a level of consciousness in which one is aware only of particulars and not in any sense at all aware of universals. A being whose consciousness was in such a state could never learn anything; and if *per impossibile* it could, its learning when acquired could never be applied.³¹

It is possible that in some creatures the capacity of recognizing their food or their enemies is unlearned, "instinctive" as we say; and that the function of sense-experience is merely to actualize these already existing recognitional powers. But in most animals, perhaps in all, sensation has another function as well. It enables one to learn from experience, and thereby to respond more effectively to one's environment. To put it rather extravagantly, sense-experience exists for the sake of *induction*.³²

est quod competit sensibili animae secundum propriam naturam; *aliquid* vero, secundum quod habet aliquam participationem modicam rationis, attingens ad ultimum eius in sui supremo; . . . Sicut vis imaginativa competit animae sensibili secundum propriam rationem, quia in ea reservantur formae per sensum acceptae; sed vis aestimativa, per quam animal apprehendit intentiones non acceptas per sensum, ut amicitiam vel inimicitiam, inest animae sensitivae secundum quod participat aliquid rationis: unde ratione huius aestimationis dicuntur animalia quamdam prudentiam habere."

³⁰ Even though there is no doubt that such a construction is sometimes suggested by St. Thomas himself, e. g., *In III de anima*, lect. 13, n. 397; *In I Met.*, lect. 1, n. 11; *et alibi*.

³¹ Price, *op. cit.*, p. 43.

³² *Ibid.*, p. 42. "Our conclusion so far is that recognition of individuals is derivative. **It** is recognition of characteristics which is fundamental. There can be no recognition of individuals (not even mis-recognition of them) unless there is already recognition of characteristics. And there are probably forms of consciousness in which recognition of characteristics occurs but recognition of individuals does not." (*Ibid.*, p. 41). "**I** am tempted to add that the philosophical

Just what the contrast is between *vis aestimativa* and *vis cogitativa* we shall presently have to see. But it is certainly not the contrast between instinct on the one hand and intelligence on the other. That is why *vis aestimativa* ought not to be understood exclusively as a name for a psychological faculty, but beyond this as a descriptive term for a condition or state-specifically, the state of animal intelligence at the upper reaches of what it can in principle attain.

B. *The Traditional Language of Faculties.*

Because of the widespread misunderstanding of this point, it is not unreasonable to abandon the traditional terminology of the "internal senses" entirely, and to substitute for it another expressly designed to obviate the exaggerations to which the language of "faculties" has been mother. This is the course chosen, for example, by Dr. Mortimer J. Adler, who suggests the use of a contemporary, neutral, and dialectically fashioned terminology for those who wish to point out the difference between human intelligence and animal intelligence without having to caricature the attainments open to the latter:

I propose that the non-verbal thought processes of animals-processes that remove the animal, in one way or another, from the domination of the immediate sensory stimulus- consists in (a) perceptual traces or residues, and (b) perceptual attainments. By perceptual traces or residues I mean memory-images that function representatively, i.e., in place of sensory stimuli that are no longer themselves operative. By perceptual attainments I mean the products of perceptual generalization and discrimination. I will use the term "perceptual abstraction" to name such products. Since all these elements are perceptual-either the *consequences* or the products of perceptual activity-it seems fitting to identify the thought processes of animals with *perceptual* thought.³³

Degrees of animal intelligence are supposedly correlated with the degrees to which they possess the power of perceptual generaliza-

myth of a purely sensitive consciousness, aware only of particulars, is one of the most important reasons for the rise of Behaviourism." (*Ibid.*, pp. 43-44).

³³ Adler, *The Difference of Man*, p. 153.

tion and discrimination-the power to acquire perceptual abstractions. Degrees of this power, Professor Kluver has shown, can be experimentally measured by what he calls "the method of equivalent and non-equivalent stimuli."³⁴

That is one way to avoid being misled by the language of faculties. It is not, however, necessary to go to this extreme philosophically, convenient though it might prove dialectically. Philosophically, it is possible instead to follow Price's counsel: "The language of faculties is not to be rejected altogether. It is right and proper to use it as a rough and ready 'first aid' in a preliminary classification of mental processes. But if it is a useful servant, it is also a bad master, and we must not allow it to tyrannize over us."³⁵

Adopting this alternative, it can be said that "intelligent behavior, no less than thinking, depends on the awareness of *universalia in re*. It should follow (though this conclusion was not generally drawn, and was sometimes even denied) that even animals have some awareness of universals, since they are certainly capable of intelligent behaviour; at any rate, they must be capable of recognizing universals 'in their instances,' even if they cannot conceive of universals *in abstracto*."³⁰

C. *The Notion of "Vis Aestimativa" and of "Experimentum."*

To understand how this is so, three points of classico-medieval Aristotelianism must be rightly and carefully understood, specifically, the concept of *experimentum* (roughly, "experience"), the distinction between the accidental and essential universal, and the relation of the latter to the former. Only then can the proper contrast be drawn between *vis aestimativa* (the highest attainments open in principle to the workings of animal intelligence) and *vis cogitativa* (the perceptual roots without which there could be no conceptual thought, either *primo* or *secunda*).

•• *Ibid.*, p. 154.

•• Price, *op. cit.*, p. 78.

•• *Ibid.*, p. 86.

1. *The levels or grades of sensitive life.*

With respect to the notion of experience, St. Thomas points out that there are in principle three grades or levels of animal awareness and that to each of these levels the notion of experience applies in different ways. "For some forms of animal life," he says, specifically, "for those animals which pass their entire existence fixed in one place, the influence of sensible objects in the surrounding environment gives rise to nothing beyond the collated awareness of immediate sensations; and in these forms there is no such thing as memory."³⁷ This very fact that there can be animals without a capacity for recollection means that only some animals have an internally organized field of apprehensions [sunt prudentia], since this implies provision for the future on the basis of a memory of past happenings."³⁸ On the other hand-and this is the third dimension or plane of possible animal existence-among those animals which need a memory by reason of the fact that they depend for survival on being able to orient themselves and move about, there are some in whom the estimative capacities are rigidly determined and only slightly, if at all, open to modification through experience; while in others the estimative capacities admit of a wide range of behavioral modification through experience, and only these latter kind, for example, can be effectively trained.

³⁷ *In I Met.*, lect. 1, n. 10: "In quibusdam vero animalibus ex sensu non fit phantasia, et sic in eis non potest esse memoria: et huiusmodi sunt animalia imperfecta, quae sunt immobilia secundum locum." And he cites good Darwinian reasons for the structure of sensory consciousness in such forms: "Cum enim animalibus cognitio sensitiva sit provisiva ad vitae necessitatem et ad propriam operationem, animalia illa memoriam habere debent, quae moventur ad distans motu progressivo: nisi enim apud ea remaneret per memoriam intentio pra-concepta, ex qua ad motum inducuntur, motum continuare non possent quousque finem intentum consequerentur. Animalibus vero immobilibus sufficit ad proprias operationes, praesentis sensibilis acceptio, cum ad distans non moveantur; et ideo sola imaginatione confusa habent aliquem motum, ut dicitur tertio *de Anima*."

³⁸ *Ibid.*, n. 11: "Ex hoc autem, quod quaedam animalia memoriam habent, et quaedam non habent, sequitur quod quaedam sunt prudentia et quaedam non. Cum enim prudentia ex praeteritorum memoria de futuris provideat."

It seems to me quite clear that what Aquinas is getting at here, without having at his disposal adequate field research or laboratory reports, is the distinction between *instinct* strictly so-called, i. e., between a species dominated by a pattern of behavior which is "species-predictable" or "'ubiquitous in its distribution' among *all* members of a species *without exception*,"³⁹ and *intelligence*, i. e., species the behavior of which does not seem to be dominated by a gene-determined pattern as much as it is governed by a "principle of nonrational estimations which bear the mark of individual experience and which are ceaselessly transformed by the acquisitions of experience."⁴⁰ Thus in discussing the three grades of animal life, St. Thomas uses the phrase "ex quodam naturae instinctu"⁴¹ before he draws the distinction between *illa animalia quae sunt prudentia et non disciplinabilia et ea quae sunt et prudentia et disciplinabilia*.⁴² It is true that he himself seeks to ground this distinction on the presence or absence of hearing—"inter ea vero, quae memoriam habent, quaedam habent auditum et quaedam non"⁴³—but whatever its fundament (which is

³⁹ Adler, *op. cit.*, pp. 115-116. Adler cites this statement as "the minimum meaning [of the words 'innate' and 'instinct'] that can be agreed to by all parties" (p. 115), in support of which statement he gives the following references (fn. 6, p. 312): "See Donald Hebb, *A Textbook of Psychology* (Philadelphia: W. B. Saunders Co., 1958), pp. 123-126, and 129-130, esp. p. 126. With regard to the differentiation between innate and learned behavior, see N. Tinbergen, *The Study of Instinct* (Oxford: Clarendon Press, 1951), Konrad Lorenz, *Evolution and Modification of Behavior* (Chicago: University of Chicago Press, 1965), Adolf Portmann, *Animals as Social Beings* (New York: Viking, 1961), Chapter 5; Irenaus Eibl-Eibesfeldt, "Experimental Criteria for Distinguishing Innate from Culturally Conditioned Behavior" in *Cross-Cultural Understanding* (New York: Harper, 1964), ed. by F. S. C. Northrop and H. H. Livingston, pp. 297-307."

⁴⁰ Simon, *Freedom of Choice*, p. 40.

⁴¹ *In I Met.*, lect 1, n. 11.

⁴² *In I Met.*, lect. 1, n. 12. The Latin here is not a quotation but a condensation in paraphrase of the following remarks: "... quaedam [animalia] ... licet prudentiam habere possint, non tamen sunt disciplinabilia. . . . [Alia] vero animalia . . . et disciplinabilia et prudentia esse possunt." See fn. 48 below for fuller context.

•• *Ibid.* The text continues: "Quaecumque autem auditum non habent, ut apes, vel si quod aliud huiusmodi animal est, licet prudentiam habere possint,

a question for experimental science, not for philosophy), the distinction between *instinct* and *animal intelligence* is a phenotypically sound one: "Whereas the behavior of insects is mostly instinctive [second grade of *cognitio quae est in brutis*], that of the higher vertebrates is remarkably capable of adjustment to the circumstances [third grade]." ⁴⁴ That the adaptive flexibility distinguishing the third level or grade from the second should be referred to the *vis aestimativa* is clear from the sense in which the attainments proper to the *vis aestimativa* are coincident with the capacity of perceptual abstraction and thought as Adler has explained them ("ratione huius aestimationis dicuntur animalia quamdam prudentiam habere" ⁴⁵). This is also why the exclusive translation of *vis aestimativa* as "instinct" and the view of it as innate in the sense of fixed and rigid—"determinata ad unum"—is mistaken, and an implicit denial at the theoretical level of the difference between the second and third levels of animal awareness as it is given at the level of observation. Thus the phrase used to distinguish the second level of animal life from the first—ratione prae-

non tamen sunt disciplinabilia, ut scilicet per alterius instructionem possint assuescere ad aliquid faciendum vel vitandum: huiusmodi enim instructio praecipue recipitur per auditum: unclé dicitur in libro *de Sensu et sensato*, quod auditus est sensus disciplinae. . . . Illa vero animalia, quae memoriam et auditum habent, et disciplinabilia et prudentia esse possunt.

•• Simon, *op. cit.*, p. 111.

•• *De* q. a. par 4. In *The Difference of Man*, pp. 153-154, Adler explains the difference between "intelligence" in animals and instinct in the following terms: "By a perceptual abstraction in an animal I mean a disposition to perceive a number of sensible particulars (or, in laboratory parlance, stimuli) as the same in kind or as sufficiently similar to be reacted to as the same. . . . This disposition is only operative in the presence of an appropriate sensory stimulus, and never in its absence."

"Outside of the laboratory and in the field, ethologists have found that animals have the disposition to recognize other animals as members of their own species or as members of alien species, in spite of individual differences among the perceived instances. Here again we have the operation of perceptual abstraction in animal behavior; but here the perceptual abstractions are, according to the ethologists, instinctive or innate . . . they are not perceptual *attainments*, but perceptual *endowments*. However, this difference does not affect their character or functioning as perceptual abstractions."

sentiae memoriae, quaedam animalia "aliquid prudentiae habere possunt" ⁴⁶-does not have a univocal meaning even in the order of animal consciousness. Not only is it necessary to aver that "dicitur prudentia aliter in brutis animalibus, et aliter hominibus inesse," ⁴⁷ but also that "dicitur prudentia aliter in brutis secundi gradus cognitionis, et aliter in brutis tertius gradus inesse." In the former case, *prudentia* means "an innately structured repertoire of interaction responses"; in the latter case, it means "able to learn from experience."

From this it can be seen that, on the one hand, the ancient outlines of the nature of animal intelligence were basically sound and grounded in principle, but at the same time they were also beset by a number of ambiguities and uncertainties consequent on the want of laboratory experiments and the meagerness of field researches. These ambiguities and uncertainties such as have been brought out in the foregoing textual analyses, moreover, resulted-as indeed it was inevitable they should-in a certain amount of equivocation and hesitation when it came to considering the upper levels of sensory apprehension in relation to intellectual apprehension, bearing witness to the great difficulty, as Simon says, of separating, "even incompletely, the processes pertaining to animal intelligence from the rational processes which penetrate them intimately." ⁴⁸ Therefore, it is necessary to keep before one's mind in an explicit way the question which is our guide through each of these classical texts: what is the highest level in principle open to the workings of animal intelligence, and how is conceptual intelligence related thereto?

2. *The third or highest level of sensitive awareness.*

What we have established thus far is that of the three so-called grades or levels of animal awareness, it is only the third that need be of further concern to us in the present analysis. What are the ambiguities and uncertainties in the traditional

•• *In I Met.*, lect. 1, n. 11.

"Ibid.

•• Simon, *op. cit.*, p. 11!!.

analyses of that sort of animal able to learn from experience, and how are they to be resolved in view of the question at hand?

Interestingly enough, we find in St. Thomas's analysis of the operation of animal intelligence an ambiguity exactly analogous to that which obtains in his analysis of the operation of human intelligence, but with the opposite emphasis. His analyses of the contrasts between practical and speculative reason in man and the superiority accorded to the latter are well known. Equally well known is St. Thomas's conclusion that speculative reason and the contemplative life it founds are strictly speaking more divine than human/⁹ being aspects in which man in a certain manner transcend his own proper nature. Thus he goes so far as to say that "the highest attainments open in principle to the workings of human intelligence are realized perfectly only in the divine intelligence, and, insofar as they are realized in the human mind, they exist not so much as a possession of man but rather as something borrowed by man from God."⁵⁰ And he contends that, so far as possible, it is in the light of such life and wisdom *proprie superhumana* that man must seek to organize his existence.

Now a distinction in every way paralleling this is drawn by St. Thomas in the order of animal intelligence in the text from the *De Veritate* which we have already had occasion to notice:

It should be recognized that in the order of animal awareness ... there is not only a capacity which is strictly proper to animal intelligence, but also a capacity by virtue of which the animal in an improper way attains the level of human intelligence.⁵¹

⁴⁹ Cf. Josef Pieper, *Leisure, the Basis of Culture* (New York: Mentor, 1963), esp. pp. 26-28; St. Thomas, *de Veritate*, q. 15, a. 1, and *de Virtutibus Cardinalibus*, q. 1.

⁵⁰ *In I Met.*, lect. 3, n. 64: "talem scientiam, quae est de Deo et de primis causis, aut solus Deus habet, aut si non solus, ipse tamen maxime habet. Solus quidem habet secundum perfectam comprehensionem. Maxime vero habet, in quantum suo modo etiam ab hominibus habetur, licet ab eis non ut possessio habeatur, sed sicut aliquid ab eo mutuatum."

⁵¹ *De Veritate*, q. 25, a. 2, par. 4: "Sciendum est ... quod ... ex parte appre-

In others words, the highest attainments open in principle to the workings of animal intelligence are realized perfectly, *secundum perfectam comprehensionem*, only in the workings of human intelligence; and insofar as they are realized in the animal mind they exist not so much as a possession of the animal but rather as something "borrowed" by the animal from man.

Just as the power of imagination (*vis imaginativa*) belongs to the animal soul by virtue of its proper nature as sensitive, ... so, by contrast, the capacity for practical assessments in view of development and survival (*vis aestimativa*) . . . exists in the animal soul according as it in a certain manner transcends its own proper nature.⁵²

In other words, just as the higher and more noble capacities of the human intelligence are *quaedam participatio divinae*, so the "superior et dignior" capacities of the animal intelligence are *quaedam participatio humanae*. "From such consideration it is beyond dispute," say Aquinas, "that the *vis aestimativa* is the highest and most noble among the various capacities of animal apprehension."⁵³

From this, according to the principle that each thing is said to be directed by the highest of its capacities, it would follow that, as Price says, "any creature which can be aware of present-to-past resemblance [quod habet memoriam] at all has

hensivarum virium . . . sensitivae partis, aliquid est quod competit sensibili animae secundum propriam naturam; aliquid vero, secundum quod habet aliquam participationem modicam rationis, attingens ad ultimum eius in sui supremo."

⁵² *Ibid.*: "Sicut vis imaginativa competit animae sensibili secundum propriam rationem, . . . sed vis aestimativa, per quam animal apprehendit intentiones non acceptas per sensum . . . inest animae sensitivae secundum quod participat aliquid rationis." See also Aquinas's remark in *De Potentia*, q. 5, a. 8, as cited and commented on by Yves Simon in his "Essay on Sensation," fn. 31 (in *The Philosophy of Knowledge*, ed. by R. Houde and J. Mullally [Philadelphia: Lippincott, 1960], p. 78).

⁵³ *Ibid.*, par. 5: "*Patet igitur ex dictis, quod irascibilis et concupiscibilis sunt diversae potentiae, et quid est objectum utriusque, et quomodo irascibilis juvat concupiscibilem, et est superior et dignior ea, sicut aestimativa inter cetera8 apprehensivas virtutes sensitivae partis.*"

taken the first step toward cognition also, though it still has a very long way to go and may never be able to complete the journey";⁵⁴ and it would further follow that among those animal forms belonging to the second and third grades of cognitive differentiation (which St. Thomas groups together as "animalia perfecta" over against the "animalia imperfecta" of the first grade), the more perfect among them would organize their life so far as possible *secundum quod habent aliquam participationem modicam rationis*, that is, by virtue of the *vis aestimativa* insofar as it means animal intelligence rather than mere instinct.

3. *Textual difficulties.*

There are a number of terminological difficulties that resist any smooth resolution. Let us make explicit note of them so that we can at least make some account of them.

First of all, there is the difficulty consequent on the diverse uses of the notions of imagination and memory. In distinguishing the first and lowest possible level of animal or sensory existence Thomas says: "In quibusdam vero animalibus ex sensu non fit phantasia, et sic in eis non potest esse memoria."⁵⁵ Now the term "phantasia" is usually regarded as a synonym for "imaginatio," but, if we were to make this substitution in the text just cited, the following inconsistency would result:

In quibusdam vero animalibus ex sensu non fit *imaginatio*, et sic in eis non potest esse memoria; et huiusmodi sunt animalia imperfecta, quae sunt immobilia secundum locum, ut conchilia Animalibus vero immobilibus sufficit ad proprias operationes. praesentis sensibilis acceptio . . . et ideo sola *imaginatione confusa* habent aliquem motum indeterminatum

In other words, the imperfect forms of animal life have no memory because they have no imaginative capacity, although they do have some imaginative capacity! Obviously,

•• Price, *op. cit.*, p. 74.

⁵⁵ *In I Met.*, lect. 1, n. 10.

St. Thomas has in mind some kind of distinction between "phantasia" and "imaginatio," but what exactly is it?

In the text just cited, it was said that "memoria" presupposes "phantasia," although some form of "imaginatio" can pre-exist "memoria." On this accounting, "imaginatio" would be a capacity lower in the scale of sensory consciousness than the capacity for "memoria." This inference is borne out in a later passage of the same *lectio*:

Dicit [Aristotelis] ergo quod vita animalium regitur imaginatione et memoria; imaginatione quidem, quantum ad animalia imperfecta; memoria vero quantum ad animalia perfecta. Licet enim et haec imaginationem habeant, tamen unumquodque regi dicitur ab eo quod est principalius in ipso.⁵⁶

But, while this way of stating the matter is consistent within the *lectio*, it conflicts with the statement in the *De Veritate* according to which the *vis aestimativa* is placed at the summit of sensory consciousness⁵⁷ and would accordingly be the *virtus regitiva vitae quantum ad animalia perfecta saltem in tertium gradum cognitionis sensitivae*. It also conflicts with the statement that "vis imaginativa competit animae sensibili secundum propriam rationem,"⁵⁸ for if "imaginatio" is the same capacity as the "vis imaginativa," the text just cited from *In I Met.*, lect. 1, n. 14 (at fn. 56 above), is saying in effect that, whereas the imperfect animals are ruled by *id quod competit animae sensibili secundum propriam rationem, scil., imaginatio seu vis imaginativa*, the perfect animals are ruled by *aliquid quod competit animae sensibili secundum rationem non propriam, scil., memoria*. This ambiguity is compounded by the use of the phrase *vis imaginativa* in the *Summa Theol.*, I, q. 85, a. 2 ad 3, which, as we have already seen (see text above at fn. 20), certainly suggests that the *vis imaginativa* corresponds to the highest capacity of sensory awareness, whereas the text from *De Veritate*, q. 25, a. 2, par. 4 (cited

•• *Ibid.*, n. 14.

⁵⁷ See fn. 58 above.

•• *De Veritate*, q. a. par. 4.

in fn. above) sharply distinguishes the *vis aestimativa* as the highest sensory capacity from the *vis imaginativa*.

These ambiguities, in my judgment, amply reinforce Price's observation that "the language of faculties is a useful servant but a bad master"; and they indicate the justice of my earlier remark to the effect that the term *vis aestimativa* cannot be understood as a name for a distinct faculty, unless it is also understood in wider terms as a descriptive label for animal intelligence both in its instinctive and educable manifestations,⁵⁹ or for what Adler aptly calls the capacity for perceptual thinking. Thus Gredt, for example, after restricting the notion of *vis aestimativa* to the instinctive aspect of animal intelligence⁶⁰ and equating *phantasia* with *imaginatio*, so that *phantasma* becomes simply "imago rei in phantasia existens,"⁶¹ is compelled to concede the inadequacy of this rigidly delimited terminology when it comes to explaining the precise manner in which sensory awareness serves as the foundation of intellectual conceptions, saying that, in this reference, *phantasma* does not mean simply "product of imagination" but rather the combined product of all three of the higher "senses."⁶² In general, what seems to me to be missing from contemporary expositions of the traditional doctrine of the internal senses is a clear analysis of the ways in which the so-called senses

⁵⁹ As we shall see, whereas *vis aestimativa* in the former reference betokens *instinct*, in the latter reference it betokens what Aquinas and Aristotle called the *experimentum*.

⁶⁰ Josephus Gredt, *Elementa Philosophiae Aristotelico-Thomisticae*, editio decima tertia recognita et aucta ab Eucharío Zenzen (Barcelona, Spain: Herder, 1961), p. 422, par. 501. See also John of St. Thomas (ne Jean Poinso), *Cursus Philosophicus Thomisticus*, Reiser ed., (Marietti, 1937), Vol. III, p. 264a12-b16.

⁶¹ *Ibid.*, p. 418, par. 497.

⁶² *Ibid.*, p. 470, par. 551, n. 2: "Vocem *phantasiae* latius sumimus, quatenus complectitur etiam memoriam sensitivam et cogitativam, seu quatenus significat tres altiores facultates partis sensitivae. Hae facultates objectum cognoscunt independentem a praesentia et secundum omnes qualitates suas sensibiles, ac proinde intellectui objectum praebent, ex quo quidditativum cognitionem haurire possit." For the rationale of this usage of the term "phantasia" in a broad as well as in a restrictive sense, see Jean Poinso, *Cursus Philosophicus*, III, Q. 8, Art. 2, esp. 252a43-b2, 253a42-46, 258a9-37.

are not only analytically distinct but also existentially separable—the sort of analysis essayed in former times in such neglected classics as Jean Poinso's treatise *De sensibus internis*.⁶²

However, such an analysis is not essential to our immediate purpose, which is to get clearly in mind the meaning of *experimentum*; and having taken note of the foregoing difficulties, we may resolve them sufficiently for our immediate purpose in the following manner.

4. *Resolution of difficulties: the synonymy of "vis aestimativa" and "experimentum."*

Inasmuch as Thomas says that the lives of the "perfect" animals are ruled by *memoria*,⁶³ whereas the *vis imaginativa* belongs to the sensitive soul according to its own proper nature,⁶⁴ it is clear that *in this respect* the two terms are being used synonymously. On this acceptance, we would expect that, just as St. Thomas says with respect to the *vis imaginativa* that it is in animal life inferior to that higher level of sensory awareness, the *vis aestimativa*, which is a *quaedam participatio humanae cognitionis*, so over and above *memoria* there would be found in the more perfect of the *animalia perfecta* some further achievement of animal consciousness.⁶⁵ This expectation is realized.

••• This treatise forms Q. 8 of the *Cursus philosophicus*, Vol. III (Reiser ed.; Rome: Marietti, 1937), pp. 241-271, esp. Art. 2, "Quid sint phantasia et reliquae potentiae interiores, et in quibus subiectis sint."

•• *In I Met.*, lect. 1, n.14.

•• *De Veritate*, q. 25, a. 2, par. 4.

⁶⁵ This leaves unresolved, however, the question of how to interpret St. Thomas's earlier reference in par. 11 (of this same *lectio* which makes *memoria* the rule of perfected animal life) to "judgment" in "animals other than man" as being founded on "a certain natural instinct." "Judicium autem de rebus agendis non ex rationis deliberatione, sed ex quodam naturae instinctu, prudentia in aliis animalibus dicitur. Unde prudentia in aliis animalibus est naturalis aestimatio de convenientibus prosequendis, et fugiendis nocivis, sicut agnus sequitur matrem et fugit lupum." (*In I Met.*, lect. 1, n. 11) St. Thomas clearly has the *vis aestimativa* in mind here, yet equally clearly he has in mind only that sense of it which translates as "instinct" rather than animal intelligence. Perhaps the

Over and above memory, ... the next and highest level of sensory consciousness is that organization of past perceptions which is made on the basis of memory and which is called "experience." Now although this manner of learning through interaction is something properly human achieved by virtue of the *vis cogitativa*, which is also called the *ratio particularis*, [inasmuch as, on the one hand, this capacity is rooted in the material aspect of the soul; on the other hand,] because animals too habituate themselves to the pursuit and avoidance of certain things on the basis of a memory of previous encounters, it must be allowed that some among the brute animals are able to achieve that organization of consciousness which is here called experience.⁶⁶

best that can be said in the face of these difficulties is that at the first and lowest grade of sensory consciousness are those animals which are able to respond only to the actual presence of an edible object by an innate "knowledge," or to a direct physical assault in a simple reflex way. At the second level or grade of sensory consciousness are located all those forms which have sufficient memory to spatially orient themselves but the general life-style of which is governed by innate mechanisms of response or instinct, as is clear in the world of insects. At the third or highest level of sensory apprehension are those animal forms which lie in the anthropoid evolutionary line, animals capable of perceptual thought and rudimentary forms of imitative transmission of behavior. But there is no way of smoothly integrating even this usage with *aU* the others that have come to light. Yet, for all the confusion at the verbal level, the thought involved remains surprisingly constant and clear. "But though sense-perception is innate in all animals, in some the sense-impression comes to persist, in others it does not. So animals in which this persistence does not come to be have either no knowledge at all outside the act of perceiving, or no knowledge of objects of which no impression persists; animals in which it does come into being have perception and can continue to retain the sense-impression in the soul: and when such persistence is frequently repeated a further distinction at once arises between those which out of the persistence of such sense-impressions develop a power of systematizing them and those which do not." (Aristotle, *Posterior Analytics*, Bk. II, ch. 19, 99b35-100a4.) Cf. also Henri Bergson, "The Divergent Directions of the Evolution of Life-Torpor, Intelligence, Instinct," Ch. I of *Creative Evolution*, authorized trans. by Arthur Mitchell (New York: Modern Library, 1944), pp. 109-203.

•• *In I Met.*, lect. 1, n. 15: "Supra memoriam autem ... proximum est experimentum, quod quaedam animalia ... participant ... parum. Experimentum enim est ex collatione plurium singularium in memoria receptorum. Huiusmodi autem collatio est homini propria, et pertinet ad vim cogitativam, quae ratio particularis dicitur. Minus tamen haec vis est in parte sensitiva. In *III de Anima*, lect. 13, n. 397]: quae est collativa intentionum individualium, sicut ratio universalis intentionum universalium. Et, quia ex multis sensibus et memoria animalia ad aliquid consuescunt prosequendum vel vitandum, inde est quod aliquid experimenti,

D. *The Accidental and the Essential Universal.*

This particular conception of experience lies at the base of the distinction between the *per se* and *per accidens* universal.⁶⁷ The following text comes closest to making this clear, provided that, in reading it, one adverts explicitly to the concession that in principle the level of the *experimentum* is open to animal intelligence in some measure:

Just as memory comes to be in those animals able to retain the impressions of sensation, so likewise does experience come to be on the basis of the recognized repetition of similar sense impressions on separate occasions and under differing circumstances, inasmuch as experience is nothing other than familiarity based on a multiplicity of memories.

Yet familiarity presupposes some active assessment whereby one thing is compared with another and related thereto.⁶⁸ --- An active assessment of this kind goes beyond the impressions of sense by

licet parum, participare videntur. Homines autem supra experimentum, quod pertinet ad rationem particularem, habent rationem universalem, per quam vivunt, sicut per id quod est principale in eis" (see further citation in fn. 67 below).

⁶⁷ *Ibid.*, n. 16: "Sicut autem se habet experimentum ad rationem particularem, et consuetudo ad memoriam in animalibus, ita se habet ars ad rationem universalem. ("Experimentum" and "consuetudo" here are synonymous, saving only the difference between perceptual thought as suffused by understanding ("experimentum" strictissime dictum) and perceptual thought in a pure state ("consuetudo" in animalibus brutis); "memoria" is loosely used here to designate the highest level of organization of perceptual thought as perceptual, and therefore is partly synonymous here with "vis aestimativa" (see the analysis of the Textual Difficulties in Section III-C-3 of the present article), which in turn is a synonym for "ratio particularis" -saving, again, the aforementioned difference between qualified and unqualified perceptual generalization: thus, "experimentum seu consuetudo" here = what I am calling the "universale per accidens," whereas true art, "ars" as superordinate to "experimentum," already depends for its reality and existence on the workings of the "ratio universalis seu intellectus," i.e., on the products of conceptual thought properly so-called, the "universale per se.")] Ideo sicut perfectum vitae regimen est animalibus per memoriam adjuncta assuefactione ex disciplina, vel quomodolibet aliter, ita perfectum hominis regimen est per rationem arte perfectam. Quidam tamen ratione sine arte reguntur; sed hoc est regimen imperfectum." Parallely: some animals are governed by instinct with little or no contribution from experience, but this is an imperfect level and pattern of sensory existence.

⁶⁸ Compare Thomas's thought here with the remarks made by H. H. Price in *Thinking and Experience*, pp. 33-35.

relating a number of them under some common aspect, which the intelligence can consider in itself apart from any one particular memory or sense-impression.⁶⁹

The "transcendence of the given" through experience is exactly what is meant first of all by the "universal": "the mind persists in attending to its perceptions until it discriminates some aspect under which they may be unified, which is what is meant by a universal."⁷⁰ How the universal is further distinguished as accidental or essential may be seen from the following:

If many singulars which are indifferent under one or another of their actual aspects are apprehended as such by the mind, that one aspect or aspects under which they are not different, when apprehended by the mind, becomes a universal in the primary sense, whether it pertains to the essence of the singulars or not.⁷¹

There we have the basis for the distinction between the essential and the accidental universal.⁷² The relations between

⁶⁹ *In II Post. Anal.*, lect. 20, n. 592: "ex sensu fit memoria in illis animalibus, in quibus remanet impressio sensibilis, sicut supra dictum est. Ex memoria autem multoties facta circa eandem rem, in diversis tamen singularibus, fit experimentum; quia experimentum nihil aliud esse videtur quam accipere aliquid ex multis in memoria retentis.

"Sed tamen experimentum indiget aliqua ratiocinatione circa particularia per quam confertur unum ad aliud, quod est proprium rationis. . . . Ratio autem non sistit in experimento particularium, sed ex multis particularibus in quibus expertus est, accipit unum commune, quod firmatur in anima, et considerat illud absque consideratione alicuius singularium."

⁷⁰ *Ibid.*, n. 595: "anima stat per considerationem quousque perveniatur ad aliquid impartibile in eis, quod est universale."

⁷¹ *Ibid.*, n. 594: "Si enim accipiantur multa singularia, quae sunt indifferentia quantum ad aliquid unum in eis existens, illud unum secundum quod non differunt, in anima acceptum, est primum universale, quidquid sit illud, sive scilicet pertineat ad essentiam singularium, sive non."

⁷² The distinction between the "universale quod pertinet ad essentiam" and the "universale quod pertinet ad accidentia alicuius rei existentis" is first of all simply the distinction between concepts which express what are real essential definitions philosophically speaking, on the one hand, and concepts which express definitions which are real but descriptive of a syndrome of accidents rather than of an essential property in the strict sense, on the other hand: see J. N. Deely, "The Philosophical Dimensions of the Origin of Species," Part II, *The Thomist*,

the two include the relation of sense to intellect. To see how this is so, it is necessary to see the manner in which a purely animal intelligence can attain to an accidental universal, without any need at all for concepts in the strict sense. St Thomas gives the following example of an accidental universal:

Through experience we find that Socrates and Plato and many others are indifferent with respect to whiteness, and we apprehend this unifying feature, whiteness, as an accidental universal.⁷³

Now consider this example in the following situation. Imagine a dog lost in a jungle while a puppy, and having to grow up fending for itself. In the area where the dog grows up there are two mutually hostile tribes, one made up entirely of black men, the other made up entirely of whites. In the course of his hunting the dog in one way or another recurrently comes upon members of both tribes and is equally suspicious of black and white the first few times. However, on every occasion that the dog both notices and is noticed by one of the black men, the black makes some sort of friendly overture, either by throwing the animal a bit of food, or by calling out in a friendly voice, or by some other such gesture of "friendship." Whenever the dog is noticed by a member of the white tribe, the very opposite occurs. The white man stones the animal or clubs it and in general manifests an active hostility. **It** is not long before the dog seeks to actively avoid any member of the white tribe

XXXIII (April, 1969), esp. pp. 827-828. In a secondary sense, however, the distinction rests on the difference between the order of perceptual abstractions and that of conceptual abstractions, inasmuch as a unification of individuals by the mind under some common sensory features with respect to which "they are not different" can take place perceptually as well as conceptually-which is the whole point of applying the term "abstraction" in Geach's and Price's sense to both orders. It is this subdistinction of the per accidens universal that is important for the present discussion.

⁷³ *In II Post. Anal.*, n. 594: "Quia enim invenimus Socratem et Platonem et multos alios esse indifferentes quantum ad albedinem, accipimus hoc unum, scilicet, album, quasi universale quod est accidens." See fn. 78 above on the primary and secondary senses of the "universale quod est accidens," and on the sub-distinction of the secondary sense according as the "universale quod est accidens" is conceptual or perceptual in nature.

and tentatively to multiply encounters with members of the black tribe. Without any need for words, and indeed without any capacity at all for speech, the dog reaches a conclusion very much like the propositions "All white men are enemies" and "All black men are friends."

It is easy to see that this process by which the animal comes to regard all white men as enemies and all black men as friends is that very process "of discriminative attention to some feature given in experience" which Geach tells us "is thoroughly incoherent."⁷⁴ It is also clear that it is the very process which the birth of conceptual thought in man presupposes and from which the primitive concepts directly take rise, both those of the theoretical and those of the practical order. From one point of view, the development of awareness is a unitary process proceeding from singular impressions through memory and experience to the formation of general categories:

Out of sense perception comes to be what we call memory, and out of frequently repeated memories of the same thing develops experience; for a number of memories constitute a single experience. From experience again—i. e., from the universal now stabilized in its entirety within the soul, the one beside the many which is a single identity within them all—originate the skill of the craftsman and the knowledge of the man of science, skill in the sphere of becoming and skill in the sphere of being.

We conclude that these states of knowledge are neither innate in a determinate form, nor developed from other higher states of knowledge, but from sense-perception. It is like a rout in battle stopped by first one man making a stand and then another, until the original formation has been restored. The soul is so constituted as to be capable of this process.⁷⁵

So true is it that there is a communality between the highest attainments of animal intelligence and the origin of the primitive concepts in man—the "species intelligibiles ipsae" of I, q. 85, a. 2, ad 3—that Aquinas, in commenting on the text just cited from Aristotle, expressly remarks on the confusion which

•• Geach, *op. cit.*, p. 19.

•• Aristotle, *Posterior Analytics*, Bk. II, Ch. 19, 100a 4-13.

will result if one does not keep in mind the distinction between the essential and accidental universal, both of which are proper to man, but the latter of which is attainable in an improper sense even by some among the animals.⁷⁶ Pierre Duhem, in his remarkable history, summed the matter up in a line: "Aristotle [in this followed by Aquinas and H. H. Price, and opposed by Geach] believes that a part of the truth directly grasped by the senses is carried up to the level of the theory," i. e., of the theoretical understanding of the structure of the world.⁷⁶⁻

•• *In II Post. Anal.*, lect. 110, n. 593: "Posset autem aliquis credere quod solus sensus, vel memoria singularium sufficiat ad causandum intelligibilem cognitionem principiorum, sicut posuerunt quidam antiqui, non discernentes inter sensum et intellectum; et ideo ad hoc excludendum Philosophus subdit quod simul cum sensu oportet praesupponere talem naturam animae, quae *possit pati hoc*, idest quae sit susceptiva cognitionis universalis, quod quidem fit per intellectum possibilem; et iterum quae possit agere hoc secundum intellectum agentem, qui facit intelligibilia in actu per abstractionem universalium a singularibus."

That the danger of confusion here is indeed more real than apparent can be seen from H. H. Price's gloss, in *Thinking and Experience*, pp. 60-61, on this very passage of Aristotle's text. If we keep clearly in mind Adler's decision to restrict the term "abstraction" preclusively to the perceptual order, then in my judgment the interpretation of Aristotle from *The Difference of Man*, fn. 9, p. is unexceptionable. Cf. Price, *op. cit.*, pp. 60-61; also pp. 35, 43, 56, 73, and 341-358.

⁷⁶⁻ Pierre Duhem, *Le système du monde de Platon à Copernic* (Paris: Hermann, 1913), I, p. 140. Yves Simon, in a brilliant "Essay on Sensation" (in *The Philosophy of Knowledge*, edited by R. Houde and J. Mullally [Philadelphia: J. P. Lippincott Co., 1960], pp. 89-91), in the course of unravelling the knotty problem of the "truthfulness" of sensation-i.e., of whether, over and above yielding information about the useful or harmful effects of surrounding agents upon our bodies (over and above their undoubted *pragmatic* reliability in ordinary course), the senses also provide an avenue to the grasp of what things are (ways to a world of scientific intelligibility) -sets himself to determine "what relation there is between the sense qualities as sensed and the same qualities as understood." His answer to this question contains observations paralleling those of Price indicated in fn. above, namely, that *it is not the singular as such and for its own sake that captures the everyday interest of animals*. On the contrary, the Practical Man, the Scientific Man, the Philosophical Man, and the brute animal alike have this minimum in common: that the best of their attention "goes to the regularities observed in changing situations." Yet it is important to add here that in a footnote on this text (fn. 38 on p. 90) Simon calls attention

E. *The Proper Contrast Between Animal Intelligence ("Vis Aestimativa ") and the Perceptual Roots of Concept-Formation in Man ("Vis Cogitativa ")*.

Only in this way can the proper contrast between the *vis cogitativa* and the *vis aestimativa*, between perceptual and conceptual abstraction, be drawn:

Whenever a man apprehends something singular, as when on seeing some colored object I perceive this particular man or this particular animal, it is through the operation of the *vis cogitativa* But in the case of brute animals, the awareness of singular existents is brought about through the operation of the *vis aestimativa* The *vis aestimativa* achieves this awareness differently than does the *vis cogitativa*. For the *cogitativa* apprehends the individual as existing under a common nature, which is possible for this perceptual or sensory capacity only by virtue of existing in a human subject, who is able to perceive this man precisely according as he is this man [existing in his own right, and not merely as something to be eaten, feared, etc.], and this stick of wood according as it is this stick of wood. The *aestimativa*, by contrast, does not apprehend any individual object according as it is under a common nature but only to the extent that it is a term or principle of some action or experience, as the sheep knows this particular lamb principally as something to be suckled, or knows this grass only under the aspect of food. And because the brute animal can only apprehend things in relation to itself, whatever does not have some relation to its own actions or passions is in no way perceived by the animal's *vis aestimativa*. For the intelligence in animals is entirely absorbed in actions and experiences so as to seek out what satisfies it and avoid what does not, without any concern for or awareness of the reality of things in themselves. ⁷⁷

to the logical fate of the position that, over and above its pragmatic significance, sensation as such has no *theoretical* import for philosophy: "if sense impressions do not resemble bodies, except fortuitously, how can they supply regular information about the effects that their nature exerts, upon ours? The great metaphysical myths of occasionalism and preestablished harmony will soon be needed to account for the dependability of the senses, with regard to utility and harmfulness, in a system which denies them all dependability with regard to the real state of affairs."

⁷⁷ In *II de Anima*, lect. 13, n. 396-398: "Si vero apprehendatur in singulari, utputa cum video coloratum, percipio hunc hominem vel hoc animal, huiusmodi quidem apprehensio in homine fit per vim cogitativam . . . in parte sensitiva;

Such is the real contrast between human and animal intelligence, both of which "abstract" in the precise sense thoroughly incoherent to Geach. (So much the worse for Geach.)

We notice more regularities than animals do, because a knowledge of "how nature works" gives us a certain satisfaction in itself, though in some men the satisfaction is small. The animal achieves the ideal which the Practical Man only approaches; he only notices the constant conjunctions which are directly relevant to his biological needs. His inductions, such as they are, are based upon these regularities. He does not bother his head with generalizing about others, and so his generalizations are few, and very closely bound up with action. When A recurs, its occurrence is not so much a premiss from which B can be inferred, as an opportunity for B-seeking action; or in other cases ... an urgent signal for B-avoiding action. The animal mind is the Pragmatist's paradise.⁷⁸

quia vis sensitiva in sui supremo participat aliquid de vi intellectiva in homine, in quo sensus intellectui coniungitur. In animali vero irrationali fit apprehensio intentionis individualis per aestimativam naturalem

"Differenter tamen circa hoc se habet cogitativa, et aestimativa. Nam *cogitativa* apprehendit individuum, ut existens sub natura communi; quod contingit ei, in quantum unitur intellectivae in eodem Rubiecto; uncle cognoscit hunc hominem prout est hic homo, et hoc lignum prout est hoc lignum. *Aestimativa* autem non apprehendit aliquod individuum, secundum quod est sub natura communi, sed solum secundum quod est terminus aut principium alicuius actionis vel passionis; sicut ovis cognoscit hunc agnum, non in quantum est hic agnus, sed in quantum est ab ea lactabilis; et hanc herbam, in quantum est eius cibus. Uncle alia individua ad quae se non extendit eius actio vel passio, nullo modo apprehendit sua aestimativa naturali. Naturalis enim aestimativa datur animalibus, ut per eam ordinentur in actiones proprias, vel passiones, prosequendas, vel fugiendas," as St. Thomas accounts for elsewhere (*In I Met.*, lect. 1, n. 14) in the following Darwinian terms: "In hoc vero, quod cognitionem animalium determinat per comparationem ad regimen vitae, datur intelligi quod cognitio inest ipsis animalibus non propter ipsum cognoscere sed propter necessitatem actionis." This contrast between the human and the brute perception of the singular is expressed in contemporary discussion with extraordinary clarity by Adler in *The Difference of Man*, fn. 14 p. 334.

The senses, thus, *know* indeed the singular; but *concern* with the singular *precisely as it is singular-that* is the privilege of the Poetic Man and a function of intellect as enrooted in the senses—a point made beautifully in what may well be Jacques Maritan's greatest book, *Creative Intuition in Art and Poetry* (New York: Pantheon, 1953). The "world" of the animal is one of objects organized along the lines of generalized action expectancies in terms of the "friendly" and the "hostile." and that is a sphere of accidental universals as much as it is of singulars. See the remarks of Yves Simon cited in fn. 76a above.

⁷⁸ Price, *op. cit.*, pp. 42-43. Cf. *IV Contra Gentes*, c. 38, n. 5.

These lines by Price, a profound author whom Geach has understood as poorly as he has St. Thomas, serve as an exact commentary on the text from St. Thomas last cited.

F. *The Sphere of Animal Consciousness and the World of Human Awareness.*

The animal achieves the ideal which the Practical Man only approaches: so true is this, writes St. Thomas, that when it is a question of immediate action, the difference between the essential and the accidental universal (insofar as it is based on the difference between perceptual abstraction and conceptual abstraction) is effectively suppressed. For the experience accessible to animals differs from the art which man develops only by virtue of the difference between perceptual thinking and conceptual thinking,⁷⁹ very much the difference between *vis aestimativa* and *vis cogitativa*; but when it is a question of immediate action, inasmuch as all action has reference to what exists in the physical world, this difference becomes irrelevant, so much so that the experienced animals will be able to respond with more effective intelligence than would a man given only theoretical instruction and placed in the same situation!⁸⁰ Yet in the long run, because the experienced animal would possess only know-how, without any knowledge of why ("experti autem sciunt quia, sed nesciunt propter quid"⁸¹), the human being will be able to change the situation by virtue of applying his theoretical, i.e. conceptual, knowledge of it, in ways totally beyond the comprehension of the animal, which will thereupon adapt itself to the changed cir-

•• See text cited in fn. 67 above and that in fn. 80 below.

⁸⁰ *In I Met.*, lect. 1, n. 20: "quantum ad actum pertinet, experientia nihil videtur differre ab arte. Cum enim ad actionem venit, tollitur differentia, quae inter experimentum et artem erat per universale et singulare: quia sicut experimentum circa singularia operatur, ita et ars; unde praedicta differentia erat in cognoscendo tantum. Sed quamvis in modo operandi ars et experimentum non differant, quia utraque circa singularia operatur, differunt tamen in efficacia operandi. Nam experti magis proficiunt in operando illis qui habent rationem universalem artis sine experimento."

⁸¹ *Ibid.*, n. 24.

cumstances with a cunning and thoroughness that can only further stir the admiration of the Practical Man, who, try as he might, is condemned by his nature to fall short of his animal ideal.

The order of animal intelligence, even at its summit, is one of the strictest pragmatism; there is in it neither a speculative nor a practical order of estimations. That distinction depends on seeing that there are things and aspects of reality independent of one's ambit of interest and activity, just what the brute animal in principle cannot and in fact does not see. The animal world is exclusively a world of safe and dangerous places, pleasing or unsettling circumstances, edible or distasteful objects, threatening or familiar individuals. It has frequently enough been assumed, Jacob von Uexkiill has remarked, "that all animals with eyes saw the same objects."⁸² Nothing could be less true (save perhaps Geach's interpretation of Aquinas). "The animal's 'environment' is altogether different from the natural scene; it more nearly resembles a poorly furnished room."⁸³

Animals are perfectly adapted to their sharply defined and delimited environment—perfectly adapted to it, but equally imprisoned within it, so that they cannot overstep the frontier in any way whatsoever: they cannot even find an object though armed with senses that are apparently well adapted to the purpose, unless, that is, the object fits into their selected partial world. This selected reality, selected by the biological necessities either of the individual or the ... r-pecies, so limited and sharply defined, is what Uexkiill calls *Umwelt*: 'environment' in contrast to 'surroundings' and in contrast to 'world' An animal's field of relationships is not its 'surroundings' and certainly not 'the world.' Its field of relationship is very clearly delimited 'environment': a world from which something has been omitted [namely, things in themselves, existentes in se], in which its inmate is enclosed and to which it is, at the same time, perfectly adapted.⁸⁴

•• Jacob von Uexkiill, *Der unsterbliche Geist in der Natur* (1938), p. 63, as cited in Pieper, *op. cit.*, p. 85.

⁸³ *Ibid.*, p. 76 (Pieper, p. 85).

•• Pieper, *op. cit.*, pp.

The world of human awareness, by contrast, is differentiated, *both* by the nature of the knowledge it contains *and* by the motivations of the men who inhabit it, into speculative and practical realms, interpenetrating, no doubt, and mutually fecundating, but in principle distinct. The world of animal intelligence is one of unrelieved Pragmatism, a paradise or ideal limit, as Price says, to which the Practical Man can only approximate. It is the difference, as Adler has so clearly shown, between the orders of perceptual and conceptual thinkers. ⁸⁵

On the other hand, there is no doubt that the animal intelligence is able to achieve a *quaedam participatio humanae* by forming for itself and its own well-being, and in an improper sense, an "accidental universal," i.e., "a unification by the mind [in this case the *anima sensibilis seu solummodo sensitiva*] of several things under one aspect." ⁸⁶

G. *Rational Processes and Animal Intelligence: Summary Restatement.*

Although in context St. Thomas is speaking of the operation of sense as it operates in man under the influence of reason, and, in general, when treating of this question, tends to play down the attainments of the sensitive soul as such, ⁸⁷ the foregoing discussions show that the following remarks can be

⁸⁵ Adler summarizes the issue whether concepts differ in kind or degree from percepts in terms of the presently available evidence on pp. 161-162 in *The Difference of Man*.

⁸⁶ *In II Post. Anal.*, lect. 20, n. 595. "anima stat per considerationem quousque perveniatur ad aliquid impartibile in eis [sci!., in sensibilibus], quod est universale."

⁸⁷ E. g., in the *Summa Theol.*, I, q. 78, a. 4: "Considerandum est autem quod, quantum ad formas sensibiles, non est differentia inter hominem et alia animalia: similiter enim immutantur a sensibilibus exterioribus. Sed quantum ad intentiones praedictas [sci!., sensuum interiorum], differentia est: nam alia animalia percipiunt huiusmodi intentiones solum naturali quodam instinctu, homo autem etiam per quandam collationem [sci!., per experimentum]." It is such statements as these concerning that instinctive mode of operation of the *vis aestimativa* wherein the notion of *experimentum* has no role (which are by far the more common expressions in scholasticism) that have contributed to so much misunderstanding in modern times over questions of human evolutionary origins and of the capacities of the animal mind .

legitimately appropriated in response to our question, which was never broached explicitly by Aquinas, namely, the question as to what in principle is the animal mind able to attain at its highest level of organization.

If it were the case that sense could apprehend particularities in an exclusive manner, so that by no manner or means could it apprehend a universal aspect within the particulars, it would be impossible that the knowledge of the universal should be in any way caused in us by reason of the perceptions of our senses.⁸⁸ Since therefore, as a matter of fact, we clearly do derive some of our intellectual knowledge from the objects which sense alone is able to apprehend as such, Aristotle considered it to be rather plain that we must arrive at a knowledge of the first universal principles through induction. For it is only through an inductive process that the activities of sense are able to initially establish cognitive generalizations within the organism's field of apprehension, inasmuch as the activities of sense are what bring the relevant singulars into relation.⁸⁹

Moreover, these remarks indicate the manner in which the transition from animal to man was achieved in the evolutionary series without any sharp discontinuity in the phenotypic and behavioral order, despite the irreducible difference in kind between perception and conception as ways of knowing:

When it comes to action, the distinction between art and experience, which is based on the difference between perceptual and conceptual abstraction, is obviated, because . . . that distinction rests entirely on a difference in modes of apprehension. \Where it is a question of action, however, what is important is the manip-

⁸⁸ *In II Post. Anal.*, lect. n. 595: "Si autem ita esset quod sensus apprehenderet solum id quod est particularitatis, et nullo modo cum hoc apprehenderet universalem naturam in particulari, non esset possibile quod ex apprehensione sensus causaretur in nobis cognitio universalis."

⁸⁹ *Ibid.*: "Quia igitur universalium cognitionem accipimus ex singularibus, concludit manifestum esse quod necesse est prima universalia principia cognoscere per inductionem. Sic enim, scilicet per viam inductionis, sensus facit universale intus in anima, in quantum considerantur omnia singularia." How anyone could miss this point if he has read St. Thomas with the minimum of scholarly care is a mystery to me--e. g., see the *Summa Theol.*, I, q. 84, a. 6.

ulation of singulars, and to this end any distinction in how those singulars are known [whether by animal or properly human intelligence] is not directly relevant.⁹⁰

We see therefore how the relation must be understood, and in what sense Price could say that "intelligent behaviour, no less than thinking, depends on the awareness of *universalia in re*," so that "even animals must have some awareness of universals."⁹¹ Without any confusion of the orders of sense and intellect, of percept and concept, it is possible to say that both sense and intellect apprehend universals, but in the former case it is a question of a universal which exists only in relation to the perceiving organism as an environmental factor, in Uexkiill's sense, and in no other way; whereas in the latter case it is a question of a universal which indeed exists in relation to me, but through which are seen realities as indifferent to me and in themselves as well. Similarly, both sense and intellect apprehend the singular, but in the former case the singular is apprehended properly and essentially as an aspect of environment, i. e., as something to be dealt with in the foreseeable future; whereas in the latter case the singular is always apprehended as an aspect of the world, i. e., as a particular being which exists or could exist quite apart from my dealings and interests. Moreover, these apprehensions first come about in both cases by that "thoroughly incoherent" process Geach calls abstraction.

⁹⁰ *In I* lect. I, n. "Cum enim ad actionem venit, tollitur differentia, quae inter experimentum et artem erat per universale et singulare: quia --- praedicta differentia erat in cognoscendo tantum." "Cum enim ad actionem venit . . . sicut experimentum circa singularia operatur, ita et ars," unde "tollitur differentia, quae inter experimentum et artem erat per universale et singulare." This text is cited in full in fn. 80 above. Further to this point, see J. N. Deely, "The Emergence of Man: An Inquiry into the Operation of Natural Selection in the Making of Man," *The New Scholasticism*, XL (April, 1966), esp. pp. 153-176.

⁹¹ Price, *op. cit.*, p. 36. See, however, fn. above, and the reference fn. 116 below.

IV. *Aquinas and Mr. Geach: A Study in Parody.*

In conclusion, it is enough to merely juxtapose the following two passages, to see how really insupportable is Geach's claim that the opinions of St. Thomas in the *Summa*, like Geach's own, are anti-abstractionist.

According to Geach:

We can now say something that goes for all concepts without exception: Having a concept never means being able to recognize some feature we have found in direct experience; the mind *makes* concepts, and this concept-formation and the subsequent use of the concepts formed never is a mere recognition or finding In all cases it is a matter of fitting a concept to my experience, not of picking out the feature I am interested in from among other features given simultaneously what is logically distinctive in the use of colour words [for example] is certainly not to be reached, by an act of abstraction, from the seeing of red in things.⁹²

What relation is there between such a view and that expressed in the following words?

Abstraction occurs in two ways. One way is through the operations of synthesizing and distinguishing, as when we understand that one thing does not depend on another, or exists independently of it. The other way is through an act of attention, as when we understand one thing without taking any account of something else. . . . In this second manner of abstracting, for the intellect to consider one thing in isolation from another thing on which it depends in actual existence does not involve error, as is clearest when it is a question of abstraction from sensible objects If we were to consider color and its properties without paying any attention to, say, the apple before us which is colored, or even if we express our consideration verbally, there is error neither in our opinion nor in our speech. For being colored does not necessarily imply being an apple The same remarks hold for any other consideration of aspects of the sensible world . . . : they can be legitimately considered quite apart from any individual principles not implied by them with necessity. This indeed is exactly what it means to abstract a universal from a particular, or an intelligible likeness from a sensible likeness, namely, to consider the nature

•• Geach, *op. cit.*, pp. 40-41.

involved without considering the instances represented as such by the perceptual abstractions.⁹³

The distance between this view and that expressed by Geach is logically and philosophically infinite.

A. *The Problem of Particular Judgments.*

That is why, in facing the question as to how a judgment, that is, an intellectual judgment, being "inherently general, can be tied down to particular things,"⁹⁴ what for Aquinas is the answer (*intellectu convertendo se ad phantasmata*) strikes Geach as a "metaphorical term," "obviously a mere label with negligible explanatory value."⁹⁵ What is metaphorical about saying that "even after conceptualizing the perceptual attainments of sense, the operation of the intellect continues to depend on sense,"⁹⁶ especially after having made it clear that "the agent intellect is not related to our capacity for conceptual understanding as its object, but rather as causing the potentially intelligible objects of sense to become actually so. Obviously, to function in this way there is re-

•• *Summa Theol.*, I, q. 85, a. 1 ad 1: "dicendum quod abstrahere contingit dupliciter. Uno modo, per modum compositionis et divisionis; sicut cum intelligimus aliquid non esse in alio, vel esse separatum ab eo. Alio modo, per modum simplicis et absolutae considerationis; sicut cum intelligimus unum, nihil considerando de alio. . . . Sed secundo modo abstrahere per intellectum quae non sunt abstracta secundum rem, non habet falsitatem; ut in sensibilibus manifeste apparet. . . . Si vero consideremus colorem et proprietates eius, nihil considerantes de porno colorato; vel quod sic intelligimus, etiam voce exprimamus; erit absque falsitate opinionis et orationis. Pomum enim non est de ratione coloris; . . . Similiter dico quod ea quae pertinent ad rationem speciei cuiuslibet rei materialis, . . . possunt considerari sine principiis individualibus, quae non sunt de ratione speciei. Et hoc est abstrahere universale a particulari, vel speciem intelligibilem a phantasmatis, considerare scilicet naturam speciei absque consideratione individualium principiorum, quae per phantasmata repraesentantur."

•• Geach, *op cit.*, p. 65.

⁹⁵ *Ibid.* It is useful to compare Geach's glib dismissal here with the analytical evaluation made by Jean Poinset "De necessitate conversionis ad phantasmata," in his *Cursus Philosophicus*, III, 331-3.

•• *Summa Theol.* I, q. 86, a. 1: intellectus noster "etiam postquam species intelligibiles abstraxit, non potest secundum eas actu intelligere nisi convertendo se ad phantasmata, in quibus species intelligibiles intelligit."

quired, in addition to the agent intellect, the presence of perceptual attainments, proper functioning of the sensitive powers, and deliberate effort on the part of the one seeking to understand, since we come to understand what is not known through bringing it into some actual relation with what is known." ⁹⁷

B. *The Role of the Intellectus Agens in Concept-Formation.*

Similarly, Geach's reference to the *intellectus agens* as being, for St. Thomas, "the mind's concept-forming power" ⁹⁸ shows how completely he has misread even the texts he does cite, such as I, q. 85, a. 2, ad 3. To speak exactly, the *intellectus agens* is not for St. Thomas our concept-forming power but the proximate cause postulated as necessary for establishing a proportion between understanding and nature, so that what is only potentially intelligible of itself may be established in a condition where it can actually be conceptualized. In other words, it is the cause whereby our capacity for understanding is placed in first act, on the basis of which that capacity is able to form for itself conceptions and so actually understand *in actu secunda*. This is the profound importance of the "duplex operatio intellectus" described in I, q. 85, a. 2, ad 3: "Nam *prima* quidem consideratur passio intellectus possibilis secundum quod informatur specie intelligibili. Qua quidem formatus, format *secunda* vel definitionem vel divisionem vel

⁹⁷*ibid.*, q. 79, a. 4 ad 3: intellectus agens "non se habet ut objectum, sed ut faciens objecta in actu: ad quod requiritur, praeter praesentiam intellectus agentis, praesentia phantasmatum, et bona dispositio virium sensitivarum, et exercitium in huiusmodi opere; quia per unum intellectum fiunt etiam alia intellecta. . . ." The problem of particular judgments in Geach is a totally different problem from the question as it arises in St. Thomas. In the latter case, it is a question of the manner in which the various powers of apprehension work together to constitute a unified sphere of conscious awareness; in the former case the problem stems from astonishment that a part of the cognitive dynamism, in this case the intellect, does not seem to achieve the same results when it has been cut off in analysis from its perceptual and roots, as it seems to achieve in actual exercise where it exists and operates in living contact with the perceptual order. See St. Thomas, *De Veritate*, q. 10, a. 5, *corpus*.

•• Geach, *op. cit.*, p. 130.

compositionem, quae per vocem significatur." To speak exactly, the *intellectus agens* is our abstraction making power: "it must be said that the *intellectus agens* is the cause of our concepts only inasmuch as it renders what exists under the conditions of materiality in the order of sense as existing free from those conditions at the level of intellect."⁹⁹ The elaboration and application of concepts, by contrast, i. e., the actual exercise of understanding, belongs to what St. Thomas calls the *intellectus possibilis*, not, indeed, entirely on its own resources, in terms of which it is utterly passive, but as "formed," i. e., placed *in actu primo*, by the *intellectus agens* operative on the attainments of perceptual "thought": "because it is not owing to the *intellectus agens* that sometimes we understand and sometimes we do not, but to the intellect which is in potency," in potency, that is, to natures rendered intelligible actually.¹⁰⁰ This is why, in mentioning conditions required for understanding and for the formation of concepts, over and above the presence of the *intellectus agens*, St. Thomas refers to the factor of our own sustained and repeated efforts: "et exercitium in huiusmodi opere."¹⁰¹ This is also the reason why, as Aquinas clearly points out, if the *intellectus agens* were not *primo et per se et secundum naturam propriam eius* an abstractive power in just that sense so thoroughly

•• The English here is an excessively free rendering of St. Thomas, *Summa Theol.*, I, q. 85, a. 1 ad 4: "Abstrahit autem intellectus agens species intelligibiles a phantasmatibus, in quantum per virtutem intellectus agentis accipere possum in nostra consideratione naturas specierum sine individualibus conditionibus, secundum quarum similitudines intellectus possibilis informatur"; or, as it is simply said in q. 79, a. 5 ad "dicendum quod intellectus agens causat universale abstrahendo a materia."

¹⁰⁰ *Ibid.*, q. 79, a. 4 ad "non est ex parte intellectus agentis hoc quod quandoque intelligimus et quandoque non intelligimus; sed ex parte intellectus qui est in potentia." So little does the *intellectus agens* have to do with the making of concepts to fit experience in Geach's sense (and as Geach should have surmised from q. 85, a. ad 3) that Aquinas says that "from such a point of view, the *intellectus agens* could just as well be something entirely separate from the soul," as the Averroists contend—"Et quantum ad hoc, non differt utrum intellectus agens sit aliquid animae, vel aliquid separatum" (q. 79, a. 4 ad 3).

¹⁰¹ *Summa Theol.*, I, q. 79, a. 4 ad 3.

incoherent to Geach, if it were without further ado our concept-forming power, "a man would be able to understand whenever he so wished, which patently is not the case."¹⁰²

Just how great a distortion it is to refer to the *intellectus agens* as being for St. Thomas the mind's concept-forming power could hardly be plainer than an intelligent reading of the text cited by Geach-I, q. 85, art. 2 ad 3-shows: for the *intellectus agens non format sed informat*-- the agent intellect does not form concepts; the *intellectus possibilis*, the capacity for actual understanding, forms concepts for itself once adequately determined ("formatus est") by the *intellectus agens'* action on sense. It is these concepts formed by the understanding itself *in actu secunda* through which words signify, whereas the informing of the understanding *in actu primo* can neither be expressed in words directly¹⁰³ nor even doubted interiorly when words are used to express outwardly conceptions *in actu secunda* that contradict what is seen by the understanding *in actu primo*.¹⁰⁴

V. Conclusion: Toward the Roots of the Caricature.

That suffices to answer our two questions on which, as I pointed out, the justice of Geach's "Historical Note" depended. It is not too strong to say, in view of the answers, that Geach's interpretation has no justice at all, or as little justice as it is possible for an interpretation to have.

This being the case, I would like to pose one further question: Why did Geach come up with the analysis that he did, and

¹⁰⁰ *Ibid.* This is the expression of the objection. The reply to it in effect is a statement of the conditions under which the activity of the *intellectus agens* would alone suffice for understanding, i. e., of the conditions under which it would be true to refer to the *intellectus agens* as "the mind's concept-forming power" (Geach, *op. cit.*, p. 130): "si intellectus agens compareretur ad intellectum possibilem ut objectum agens ad potentiam, sicut visibile in actu ad visum; sequeretur quod statim omnia intelligeremus, cum intellectus agens sit quo est omnia facere. Nunc autem non se habet ut objectum . . ."--i.e., since however these conditions do not obtain. . . .

¹⁰³ See text of *Summa Theol.*, I, q. 85, a. 1, ad 3, as cited in fn. 20 above.

¹⁰⁴ See Aristotle, *Metaphysics*, Bk. IV, ch. 3, 1005b 8-34; St. Thomas, *In IV Met.*, lect. 6.

in particular, how is it possible that he could have misrepresented St. Thomas so grossly? I think the answer to this question can be found on pp. 12-13 of Geach's book, where he tells us that he is concerned only with sufficient, not necessary, conditions for having a given concept. The sufficient condition for Geach is intelligent word-use, and, he tells us, "I shall not try to draw any sharp line between what is 'sufficiently like' the central and typical cases and what is not; I do not think we shall go far wrong if we concentrate henceforward on concepts exercised linguistically."¹⁰⁵

Quite apart from the fact that St. Thomas's doctrine of the *intellectus agens* does not even pertain to this level of conceptualization except indirectly (the whole question to which the doctrine of the *intellectus agens* is the answer bears entirely on the necessary conditions for conceptual thought), it is interesting to note how this way of approaching the subject of mental acts neatly avoids the really difficult and interesting problems involved in human knowing. I will mention just three examples.

On the very first pages of his book Geach puts to one side the whole problem of knowledge in what properly constitutes it as knowledge, namely, how through mental acts we are aware of realities which are other than us. This whole problem, as Price so well shows, arises from the experience of being mistaken or disappointed, from the discovery that what I thought to be there and what is there in my mind never existed or exists no longer in the natural world.¹⁰⁶ But Geach wants nothing to do with "such odd statements as 'some objects of mental acts do not exist,'" ¹⁰⁷ and he tells us "I shall accordingly state my problems not in the form 'What sort of objects do these mental acts have?' but rather in the form 'Such-and such object-expressions are used in describing these mental acts; what is the logical role of these expressions?'"¹⁰⁸

¹⁰⁵ Geach *op. cit.*, p. 13.

¹⁰⁶ See *Thinking and Experience*, pp. 75-143, *passim*.

¹⁰⁷ Geach, *op. cit.*, p. 2.

¹⁰⁸ *Ibid.*

Once the essential question of knowledge has been exorcised, of course, along with the problem of the necessary conditions for concept-formation, Geach is certainly in a position to dismiss without detailed justification the researches of psychologists into animal intelligence. A more or less arbitrary *fiat* will do: "The psychologists I am criticizing want to play down the differences between human and animal performances, and I want to stress them. The life of brutes lacks so much that is integral to human life that it can only be misleading to say that they have concepts like us."¹⁰⁹ I happen to entirely agree with Geach on this issue; but it remains the case that something a little more analytical than an "I want" vs. "they want" is called for on this difficult question.

It is surprising that Mortimer Adler should have allowed himself to read back his own thorough and deep analysis of the contrast between percepts and concepts into Geach on this point. After having carefully analyzed the studies bearing on animal intelligence and having analyzed with equal care the role that concepts play in human verbal behavior, Adler succeeds in showing that the highest perceptual attainments of animal intelligence, which Adler terms "perceptual abstractions," cannot, in terms of the available evidence, "be regarded even as a rudimentary concept of perceptible objects."¹¹⁰

Concepts (understood as quite distinct from perceptual abstractions) and concept-formation (understood as quite distinct from perceptual generalization and discrimination) are not needed and, therefore, they cannot be justified as theoretical constructs in the explanation of the observed behavior.¹¹¹

Then, having clearly worked out for himself the distinction between concepts and percepts, and limited the use of the term "abstraction" to describe the latter case, Adler writes as follows:

¹⁰ *Ibid.*, p. 17.

¹¹⁰ Adler, *op. cit.*, p. 158.

¹¹¹ *Ibid.*, p. 162.

Geach argues that the experiments that demonstrate an capacity to recognize triangles or to discriminate between triangles and quadrangles (functioning as perceptible cues or stimuli) do not indicate that the laboratory animals have formed concepts of triangularity and quadrangularity. In his view, the laboratory data can be adequately explained without positing concept-formation in animals. To do so is to confuse perceptual abstraction on the part of animals with human concept-formation which, Geach convincingly shows, does not consist in a process of abstraction at all.¹¹²

But that is not Geach's criticism, nor is it anything Geach "convincingly shows." Geach does not say that the formation of perceptual abstractions in animals makes sense, as long as we do not confuse it with concept-formation. What Geach says is "that *the whole idea* of abstraction ... is *thoroughly incoherent*."¹¹³ What Adler could have said and should have said is that he, Adler, has convincingly shown that no concepts are formed solely on the basis of perceptual abstraction, i. e., that perceptual abstractions differ in kind even from concepts of perceptible objects; and that Geach is wrong in regarding the whole idea of abstraction as incoherent, although it cannot be applied with complete univocity to perceptual and conceptual processes.

Moreover, if one wishes to restrict the application of the term "abstraction" to either the perceptual or the conceptual order (although, as we have seen, Geach uses it so loosely that it must be said to apply to both orders), one would be equally

¹¹² *Ibid.*, p. 137.

¹¹³ Geach, *op. cit.*, p. 19. Although this judgment would certainly apply to mental acts as construed by Geach! It would seem therefore that Dr. Adler has some other works of Mr. Geach in mind, works to which he does not refer in his notes, to support his remark that, along with Jonathan Bennet, Geach not only "sharpen[s] the distinction [between perceptual and conceptual thought], but also ably defend[s] it with reference to experiments on generalization and perceptual abstraction in animals, and on problem-solving by trial and error and by insight." (*The Difference of Man*, p. 137). Or perhaps he just has tongue in cheek, for, as he commented three pages earlier, when it comes to the question of the nature of the underlying psychological difference in kind between man and other animals, Geach "simply fail[s] to discuss this point." (*Ibid.*, p. 134).

justified in restricting its use to the conceptual order.¹¹⁴ Thus, when Adler says in criticism of Price, that the latter "fails to see that not all our concepts" are "formed on the basis of perceptual abstractions," and "that even those which arise in this way are not formed by an abstractive process,"¹¹⁵ Adler is using "abstraction" in his own sense, not in that of Geach or St. Thomas; and to this fact Adler himself inexplicably fails to advert. Unfortunately, Adler is correct in pointing out that Price to some extent confuses "the distinction between perceptions, memories, and images, on the one hand, and concepts, on the other," a confusion which results from "treatment of general and universal ideas as if they were the same as abstract ideas," i. e., as what Adler terms "perceptual abstractions."¹¹⁶

The third example of problem-avoidance I want to mention made possible by Geach's approach is evidenced in Geach's glib assertion that although "having a concept never means being able to recognize some feature we have found in direct experience . . . this does not in the least prevent us from applying concepts in our sense-experience and knowing sometimes that we apply them rightly."¹¹⁷ That is all Geach says on the question of how it is that our thoughts do apply to

¹¹⁴ See, e. g., *Summa Theol.*, I, q. 85, a. 1: "Cognoscere vero id quod est in materia individuali," i. e., what belongs to the perceptual order, "non prout est in tali materia," i. e., not as it is perceptual but as it is intelligible and knowable in concepts, "est abstrahere . . . Et ideo necesse est dicere quod intellectus noster intelligit materialia abstrahendo a phantamatis." i. e., perceptual abstractions in Adler's sense; "et per materialia sic considerata in immaterialium aliqualem cognitionem devenimus, sicut e contra angeli per immaterialia materialia cognoscunt." (Thus Geach is at least consistent with the internal logic of his own position: "In rejecting abstractionism, we deny a privileged position to 'sensory concepts'" [p. 41]; and what for St. Thomas held true of an angel's intellection, for Geach holds equally in human conception: in the primary application of our mind to the material environment, "'sensory' concepts have not in fact any privileged position" [pp. 41-42].) See also *Summa Theol.*, I, q. 85, a. 8: "Primo quidem, quod cognitio intellectiva aliquo modo a sensitiva primordium sumit. Et quia sensus est singularium, intellectus autem universalium, necesse est quod cognitio singularium, quoad nos, prior sit quam universalium cognitio."

¹¹⁵ Adler, *op. cit.*, fn. 9, p. 321.

¹¹⁶ *Ibid.*, fn. 12, p. 333.

¹¹⁷ Geach, *op. cit.*, p. 40.

reality. But he never even asks the question whether our concepts are that which we know, or that by which we know. "In all cases it is a matter of fitting a concept to my experience, not of picking out the feature I am interested in from among other features given simultaneously." ¹¹⁸ Small wonder that, according to Geach, "'senory' concepts have not in fact any privileged position," ¹¹⁹ or that "a child with only a few concepts and only a small understanding of language may easily possess concepts like *door* and *book* . . . before it has *any colour-concepts at all*." ¹²⁰ For doesn't a child sometimes say "door" or "book" before it says "red" or "blue" or "green"? What better proof of the order of concepts, once necessary conditions are no longer sought?

The jacket of Geach's book tells me that a writer in *The Philosophical Review* found Mr. Geach's *Mental Acts* to be "a splendid book" and that a reviewer in *Mind* considers that "it may well become something of a classic." I think that it is plain from the foregoing discussion that, while I have found Mr. Geach's book provocative and stimulating and have certainly learned from reflecting on his views, I cannot go so far as to endorse the judgment of these reviewers. The very appearance of such judgments seem to me to be rather clear indications of the justice of applying a thesis that has been put forward in other areas also to the problems in the philosophy of knowledge: it is useful to divide the history of Western philosophy by a line that separates the medieval predecessors of Hobbes and Descartes from their modern successors.¹²¹ Despite the work of our historians, the properly philosophical communications across this line are still far from reliably re-established.

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¹¹⁸ *Ibid.* See the parenthesis in fn. 114 above.

¹¹⁹ *Ibid.*, pp.

¹²⁰ *Ibid.*, p. emphasis supplied.

¹²¹ Cf. M. J. Adler's "Foreword" to Yves R. Simon's *Freedom of Choice* (New York: Fordham, 1969), esp. p. viii.

AQUINAS AND THE JUSTIFICATION OF WAR: ESTABLISHMENTARIAN MISCONSTRUCTIONS

MODERN analytical philosophy, as one sees in the pages of Christian writers like Ian Ramsey, Peter Geach, Norman Malcolm and Alvin Plantinga, has relevance to many sorts of basic problems about man, problems that philosophers in the great Western traditions have tried to solve¹ But recently not a few analytical philosophers, especially in North America, have been subjected to almost hysterical pressures from within and without to make their work "more relevant." Instead of being invited to cope merely with strings of printed wisecracks from Russell and Gellner, then with ensuing letters in the London Times, participants at some recent meetings of the American Philosophical Association² have been disturbed by noisy confrontations over "relevance." Analytical admirers of genuinely systematic thinkers like Aquinas, Aristotle, Hegel, Hume, Kant, Locke, Marx, Plato, Sartre, and Spinoza have in many cases been moving over the years towards broadening the application of the tools of modern analysis.³ Among them some would say that such disturbances are not necessarily bad. Perhaps more analysts should be moving more quickly in this direction towards a broader view of their field. But no progress is made when a journal noted for strong

¹ As "serious philosophers" concerned over such relevance, we have often found ourselves at odds over the question how much relevance modern Analytical Philosophy has or should have to such problems and the form that this relevance should take. We are agreed, nevertheless, that such relevance is possible and desirable.

² For example, in New York, December, 1969, and Berkeley, March, 1970.

³ See especially works by Gregory Vlastos, Stuart Hampshire, Wilfrid Sellars, and P. F. Strawson.

analytical contributors simply bows to the demand for "relevance," when it prints a polemical paper that distorts and wildly castigates the history and "relevance" of Christian thought in order to further a dubious political thesis. When such a paper is then rapidly placed in an anthology which will command much wider attention, it is suitable for Christian philosophers in particular, but also for any philosopher concerned with standards of historical exposition and critical thinking, to examine the paper and strike back.

The essay that we are discussing, Professor Donald Wells's "How Much Can the 'Just War' Justify?", appeared first in an issue of *The Journal of Philosophy* during December, 1969⁴ and was shortly afterwards anthologized by A. K. Bierman and J. A. Gould in *Philosophy for a New Generation* (New York, 1970). Some of its numerous errors will repay careful examination by Christian philosophers of many kinds, especially for two reasons. First, it seems to reflect a good deal of popular or easily popularizable confusions about ethics and war. There are monsters of muddle in moralist dress that Christian philosophers can really perform a "relevant" service by unmasking. Second, the dissection of these errors affords a pleasing chance to show how the allegedly sterile tools of analysis can be used together with concrete (sometimes elementary) political and historical points⁵ to very good advantage. The main analytical tool we shall use, and use often, is the old and much maligned one of drawing "relevant" distinctions. And so we must apologize in advance for a profusion of distinguishing numbers and letters in brackets.

I. *An Introduction to Some Confused Modern Thinking About War*

Throughout "How Much can the 'Just War' Justify?," Professor Wells alternates to emotive advantage between two largely incompatible views of war as if they were the same. The

⁴ December 4, 1969 (LXVI, 23), pp. 819-829.

⁵ Cf. John King-Farlow, "The Concept of *Mind*," *Inquiry* (1964), pp. 268-276.

one view (V1) holds that war, violence, and taking of life are intrinsically wrong always.

In addition, however, there is an implicit contradiction which discussants of war and justice ordinarily recognize. Since the havoc of war is normally classed with immoral actions and evil consequences, what the notion of "the just war" attempts to do is to show that under some circumstances it would be "just" to perform immoral acts and to contribute to evil consequences. Some justifications of war aim to show that actions deemed normally forbidden by moral mandates are now permissible when performed under the aegis of war.

Since the history of ethical speculation has virtually no other instance of the defense of immoral acts under the extenuating circumstance of prudential risk, the "just war" concept needs special attention. It constitutes an anomalous instance in moral discourse, namely, a glaring exception to an otherwise accepted prohibition of acts of human brutality. (pp. 819-820).

The other view (V2) maintains that war may have once been justifiable in the Middle Ages and before but is no longer so in the Twentieth Century's world of armaments that indiscriminately kill huge numbers of civilians.

The medieval hub of this argument was the doctrine of the "double effect." A just belligerent intended only as much death as would be proportional to the threat or the offense, and he would intend to kill only combatants. It was presumed that we ought not to kill non-combatants. In the Middle Ages the weapons made such concern practical. Although the archer might shoot his arrow into the air and not be too clear about where it landed, he was not in doubt about whether he was shooting it at combatant enemies. He might miss a small barn, but he hit the right city. Modern weapons make such sensitivity about the recipients of our missiles inoperable and unfeasible. (p. 826).

The discussion of "intention" in the thirteenth century, when the weapons were relatively limited in scope so that a king could implement his wish not to harm non-combatants and could practice some kind of proportionality, is something that modern men can no longer carry out. (p. 827)

Since the notion of the "just war" has been revived after nearly two centuries of silence on the issue, it seems appropriate to look

again at the medieval claims to see whether, if they had a defense then, they have any rationale now. (p. 820).

Note that V2 itself leaves Wells's position ambiguous. Is he saying (V2a) that all wars and violent uprisings must be unjustifiable *even if* they occur in militarily backward nations and *even if* "total" civilians there who are genuine non-combatants are most unlikely to be affected? If so, then what is so arithmetically *magic* about the Twentieth Century itself? Or does he really mean (if he reflects harder) to say only (V2b) that wars *at any time* which threaten mass destruction (by atom or by spear) of genuine non-combatants *must be* unjustifiable, but that wars *at any time* which involve death and suffering only for the soldiers of both sides (and only a small number of soldiers at that) *may be* justifiable? If he opts for v2b he must get clearer still and clarify his position about revolutionary civil wars so that "soldiers" will cover more than the official and uniformed troops of the government against whom the revolt takes place. Also he must revise his formulations very carefully to cover cases like the Viet-Nameese war where the distinctions between civilians and combatants, women-with-children and combatants, the unarmed and combatants, etc., frequently break down.

Note that if view V2a is meant by Wells, he goes so far as to (*Ban- I*) ban small-scale revolutionary civil wars that in certain countries even today could result in the overthrow of rigorously authoritarian ("tyrannical") regimes. And he also then bans from consideration (*Ban- II*) the possibility that small states on the borders of another small state like Duvalier's Haiti could conceivably be justified in invading that dictator's country, even if it could overthrow a highly oppressive regime with very little bloodshed. Moreover, if V2a is meant by Wells, then he must further reject as a possibility (*Ban- III*) that a major power could conceivably be justified in supplying small-scale conventional weapons like rifles and grenades to Haiti's more democratic neighbors or to democratic revolutionaries in Haiti. Similarly, if Wells is committed to V2a, he

would be precluded from saying that, had Twentieth-Century Britain refused in the 1920's to relinquish the colonial area which became the Irish Free Republic, then because of the arithmetically magic number of the Twentieth Century the I. R. A. would have been wrong to take more drastic, though still relatively limited, means on behalf of an oppressed majority in that area. Nor could he allow that other nations could have justifiably supplied the I. R. A. with arms. Nor could he allow that England and France should have tried force to stop Hitler from remilitarizing the Rhineland or from seizing Poland. If Wells really means V_{2a} and is willing to defy both Marxists and Thomists on the question of the possible justifiability of at least *some among* the wars of liberation today, then so much the better we say, as admirers of St. Thomas, for both Marxists and Thomists.

II. "*A Just War is One Declared by the Duly Constituted Authority*"⁶.

Wells attacks the medieval Christian tradition, notably its debts to the ideas of St. Thomas, because he thinks that it made all but impossible the growth of a brotherly, united world.

Incidentally, the concept functioned as a defence of national sovereignty and of the "right" of nations to defend themselves in a basically lawless world. It made national survival feasible, while making international organization unlikely. (p. Sf!O).

But this attack derives, as we shall soon try to show, from a confusion (Conf- A) of what is (Confd- i)⁷ superficially explicit in St. Thomas's major doctrines about an "authoritative sovereign" (and only transitorily relevant to Christian feudalism) with what is (Confd- ii) profoundly implicit in St. Thomas's major doctrines and vitally relevant to a century where many (not all!) forms of increasing internationalism are both possible and very often desirable.

⁶ D. Wells, *op. cit.*, pp. 821-822.

⁷ For (Confd-i) read "the first thing confused," for (Conf-A) read "the first confusion," etc.

In order to clarify the value of this distinction let us now note the main strategy of Wells's paper and digress briefly on three further confusions in that strategy. He first mentions three conditions of justification in Aquinas:

In order for a war to be just, three conditions had to be met: (1) an authoritative sovereign must declare the war; (2) there must be a just cause; and (3) the men who wage the war must have just intentions, so that good actually results from the war (p. 820).

He next cites seven conditions recently put forward by a Catholic thinker, Joseph McKenna, building on St. Thomas:

More recently, Joseph McKenna has revised the "just war" doctrine with an expanded list of seven conditions. They are: (1) the war must be declared by the duly constituted authority; (2) the seriousness of the injury inflicted on the enemy must be proportional to the damage suffered by the virtuous; (3) the injury to the aggressor must be real and immediate; (4) there must be a reasonable chance of winning the war; (5) the use of war must be a last resort; (6) the participants must have right intentions; and (7) the means used must be moral. (p. 821).

He then concentrates mainly on attacking McKenna's conditions (I), (2), (5) and (6).⁸ He is content to imply that this "attack" is a sufficient answer to St. Thomas after explicitly tossing the the Angelic Doctor these two lean bones of criticism regarding his three conditions:

In application of these criteria, the criticisms that did emerge of particular wars were so few as to suggest that princes were basically moral men or that the criteria were too vague to be useful. In addition, the critics were commonly persons not officially in government, so that their protests were a kind of baying at the moon. (pp. 820-821).

This pair of objections notably involves a confusion (Conf - B) of (Conf- iii) questions about the wisdom and relevance of Aquinas's ideas with (Conf- iv) questions whether, if

⁸ The entire remainder of Wells's paper (pp. _____) is written under four headings which state these four conditions.

Aquinas's ideas were wise and relevant, politicians claiming to be Christians thought carefully about their proper application and made good use of them. But a far worse pair of confusions seems to bedevil Wells's "attack" on McKenna's conditions (I), (5) and (6). The first of these confusions is (Conf - C): to treat (Confd- v) what is put forward as ONE necessary condition of justification among several necessary conditions that only TOGETHER, (as a SET), could constitute a sufficient condition *as if it were (ConJd- vi) a sufficient condition by itself*. Thus on pp. he dismisses McKenna's first condition ("A just war is one declared by the duly constituted authority ") as being *of no relevance at all* to modern war because so many modern leaders of States and Churches seem to him immoral or amoral. Even if this " argument " showed that the condition looked unpromising when taken *alone*, it would not show that it could not *combine* usefully with *other* necessary conditions to help with appraisals of justification! The second of these confusions is (Conf -D): to think of (Confd- vii) a proof, however sound, that something is not *always a necessary condition of justification* as (Confd- viii) a proof that this something cannot *often* be a *relevant INDICATOR* of *justifiability*.

To clarify Wells's confusion (Conf-D) consider simple, " relevant " examples. Many relatively unconfused Christians would agree that the expressions " authoritative sovereign " and " duly constituted authority " should not be applied to a revolutionary leader like George Washington in the 1770's who instituted a guerilla organization and declared war on a tyrannical regime and/or colonial oppressor. (They would mean " should not " on pain of semantic, political, and philosophical confusion.) But they would not argue that therefore revolutionary leaders like George Washington, Thomas Lord D'Arcy and Eamon De Valera caused unjustifiable wars. Thus, for such Christians, declaration of war by someone naturally and unconfusingly called an "authoritative sovereign" or "duly constituted authority" need not always be a necessary

condition for justifying a war. But they would not therefore deny that very often an *excellent indication* that a war is not justified or at least not fully justified is the fact that generals or war-lords have preempted their central government's duly constituted powers and responsibilities for starting a war. And some relatively unconfused Christians in the United States hold that one of the reasons they should query American involvement in Viet-Nam is that the heavy degree of involvement was due to President Johnson's Gulf of Tonkin declaration and not to an act of Congress, the American Constitution's "duly constituted authority" for making decisions on so great a degree of martial involvement. Such Christians, at least some of whom largely approve and some of whom strongly disapprove of considerable American involvement in South East Asia, would say that, under certain CONCEIVABLE⁹ circumstances, Johnson's plunge into "escalated war" without a formal Congressional declaration of war (A) could have been fully justified-IF special time factors and the national interests of both America and Viet-Nam had truly made his immediately acting without Congressional assent imperative-but (B) could not be justified under the actual circumstances in 1964.¹⁰ Thus Wells's confusions (Conf- C) and (Conf- D) seriously distort our understanding of how relatively clear-headed and morally concerned people do think about war-as well as obscuring points relevant for any explanation of how they ought to think.

⁹ For us to speak of the CONCEIVABLE here is to imply nothing about the justifiability of what is currently "actual."

¹⁰ St. Thomas if he were with us might well say, in answer to a universal parliamentary fanatic's complaint that he had failed to advocate parliamentary democracy everywhere in the Middle Ages, that such a critic had shown no understanding of human needs and tendencies in Europe at that period. He might similarly comment that those who today seek to impose a regime with the trappings of parliamentary democracy on all men everywhere *or* a Soviet or Maoist style regime on all countries everywhere are grossly insensitive to the actual, historical circumstances in which different nations' needs for different forms of society arise. Marx himself, who believed that different societies evolve at strikingly different rates, might well show a considerable measure of agreement. Wells himself would seem at p. 8Q4, paragraph Q, also largely to agree.

At any rate, the time has now come to look more closely at what an English-speaking St. Thomas would mean by "an authoritative sovereign" or a "duly constituted authority" in cases where he would be using such terms *technically* in the course of doing Thomist political *philosophy* rather than Wells's kind of semi-philosophical polemical journalism. The *conventional* use of such terms by journalists and arm-chair politicians, and also the *legal* use of such terms by a state's conventionally certified lawyers or judges and its power-wielding politicians, need not coincide for St. Thomas with their *philosophically proper* use at all. Failure to explore this point results in Wells's feeling able (a) to dismiss Aquinas with the comment that many historical sovereigns-people to whom these terms could apply conventionally or legally according to their state's particular laws-have not been "very reliable or sensitive" by Christians or humanist standards. (p. 821) The same failure results in Wells's feeling able, as was briefly mentioned before, (b) to ignore those *implications* of Aquinas's political philosophy that are vitally relevant to peace and international cooperation today. (Some of the most crucial of these implications we shall shortly try to make clear.) For Wells seems completely unable to grasp what Aquinas would call in modern English "the technical, philosophical distinction between a leader or governing group that has *genuine, authoritative sovereignty* and a leader or governing group only *said* to have sovereignty by those who follow misleading conventions or bad laws; the technical distinction between genuinely authoritative sovereignty and the pseudo-sovereignty of a *tyrannical* power."

According to St. Thomas, at least two conditions must be met by a ruler or ruling body if it is to have any authoritative sovereignty at all. First, it must in its basic approach respect the Natural Law, the body of moral truths which God gives all sane men of all remotely sane societies the power to grasp, at least dimly, by the Natural Light of Reason. Pointless killing and cruelty, for example, are obviously to be deplored by sane

members of remotely sane societies. (Compare Saint Paul on "Gentiles" and "Conscience" in Romans 2: 14-15). Second, it must try in creating its particular *Positive Law*--Conventionally instituted statutes regularizing a feasible form of community life at a historical period for certain humans (who like all other men have a *natural need* for organized society) -both to enhance respect for the Natural Law and to promote the citizens' Common Welfare (*bonum oommune*). St. Thomas did not, despite the repeatedly scathing remarks of Wells about modern Catholic and Protestant thinkers with any regard for the Thomist tradition ¹¹, preach a doctrine of supporting the Establishment policies on war and economics for the Establishment's sake. Indeed, St. Thomas explicitly laid down criteria for assessing the justifiability of violent revolutions against tyrannical regimes. The revolutionary criteria would include (RC- i) the persistent failure of the government to respect the Natural Law and/or the Common Welfare; (RC- ii) its failure to grant citizens effective means of peacefully gaining redress against such tyrannical abuses of power; (RC- iii) the strong likelihood that such a revolt would succeed in toppling the government and not merely result in a tyrannical bloodbath; (RC- iv) the serious chance that toppling those in power would lead to a much better government, not to mere anarchy or to another form of outright tyranny. ¹²

There are some modern meta-moralists who would now dismiss St. Thomas's appeals to Natural Law and the Common Welfare as utterly unhelpful. They would argue that the diversity of societies, with their varying moral codes and fundamental beliefs, makes his appeals to something like universal intuitions of morality and fairness a piece of antiquated junk. ¹³ There

¹¹ See his footnotes on pp. 821-823, 826-827.

¹⁰ St. Thomas Aquinas, *De Regimine Principum*, bk. 1, ch. 6, ed. Matis (Turin, 1924).

¹³ Cf. the excellent discussion of meta-ethics, social relativism, and ethical relativism in E. Sprague and P. W. Taylor's *Knowledge and Value* (2nd edition, New York, 1967), pp. 502-6. Aquinas himself was clearly aware of this diversity of human societies' beliefs-see, for example, his reply to Anselm's ontological

may well be other meta-moralists who would simply dismiss Aquinas's appeals to our ethical knowledge about matters of social and sexual morality, fairness, etc., as examples of the fallacious belief that ethical principles have a *cognitive status*. And it may be legitimate or rational for them to do so, at least until they can be convinced otherwise by reading or hearing better meta-moralists.¹⁴ But it is not open to Wells himself to disagree with Aquinas's view that some fundamental moral truths are universally graspable, that some value judgments are true and correct, others false and incorrect. This course is not open, upon pain of radical inconsistency, to a man who proclaims as all but too obviously true and readily knowable views: "There may be a credible case for claiming that the medieval discussions of the just war added to man's moral insights . . ." (p. 828);¹⁵ "If the just war ever had *moral significance* in the past, it is *clear* today that it *justifies* too much." (p. 828);¹⁵ "we would still need to *show* that the last resort ought, in this case, to be taken." (p. 825) etc.¹⁵--- Wells, in effect, appeals to a broad range of readers on the assumption that, as sane and informed persons, they can already share in many of his moral insights rather clearly and can be brought with his help to clarify others as matters of moral knowledge.

If the Natural Law forbids us to cause pointless death and pain, if the Natural Law urges us to have a brotherly concern for *all* men everywhere according to the Golden Rule, and if every society's Common-Welfare-in-the-Twentieth-Century is

argument and its definition of "God" in the *Summa Contra Gentiles*. Like Aristotle, Aquinas did not differ radically from the social relativist in the matter of anthropological knowledge but rather in the matter of interpreting such knowledge philosophically.

^u For example P. T. Geach, "Good and Evil," *Analysis*, 17 (1956), 33-42; Gabriel Marcel, *Homo Viator*, especially pp. 125-65 (New York, 1962); G. E. Moore, *Principia Ethica* (Cambridge, 1903); Peter Glassen, "The Cogitivity of Moral Judgments: A Rejoinder to Miss Schuster," *Mind*, LXXII (1963), 137-40. Cf. John King-Farlow, "From GOD to IS and from IS to OUGHT," *Philosophical Quarterly*, 7 (1957), 136-48.

¹⁵ Our italics emphasize these "epistemologically loaded" words that commit Wells to moral cognitivism.

now rather clearly linked with avoiding a nuclear holocaust, then any modern government that St. Thomas would consider authoritatively sovereign would be bound today to be greatly concerned with the protection of world peace and with international cooperation. **It** is now, of course, vastly easier than in the thirteenth century for a good leader or good government to communicate quickly with foreign powers over great distances. It is obviously far clearer to governments that failure to improve international relations may well lead to enormous amounts of pointless (hence morally intolerable) human suffering or death; that such failure might lead to the extinction of their own societies with all citizens. An authoritative sovereign concerned both with the Natural Law and with his society's Common Welfare must surely find today that St. Thomas's concept of authoritative sovereignty points far away from narrow forms of nationalism.

Some might then complain (as we suspect Wells would in reply) that St. Thomas, if he was politically wise at all, should have been in his politics (Pol-1) a far more explicit and outspoken advocate of international cooperation; (Pol- 2) an open supporter of a strong centralized World Government. Such complaints deserve the following replies among others. (Pol- 1): To admire St. Thomas's political philosophy and count it very relevant today is not to attribute omniscience to him, or wisdom only to him and to no one else. St. Thomas, like all human thinkers, was seriously limited in various philosophical and political respects by the times and traditions in which he worked. Nor was political philosophy his most central concern in his research and reflection. Perhaps, like most other good philosophers, he could have helped mankind more by devoting further time and effort to the area and to questioning harder the political assumptions of his day. **It** is questionable whether even now a strong centralized World Government would be feasible for present nations with such divergent interests and forms of life. **It** is tempting to say that, because of nuclear armaments' threat to mankind, such

a World Government must quickly be made feasible and imposed upon mankind. Even if this could be done, however, might not the consequence of imposing it be an intolerably bloody succession of nationalist wars as well as an intolerably inhuman suppression of personal liberty and communal aspirations? The appalling possibilities that might result from the attempted imposition of *one ideology* on the whole world through a self-perpetuating contest between one or more rival World Governments have been brilliantly, perhaps very prophetically, explored by George Orwell in *1984*. In spite of the nuclear threat, or perhaps because of it, the forming of a genuinely healthy type of strong World Government may only be feasible if and when what Montesquieu called the Spirit of the Nations will have changed greatly through some of the possibly more beneficial effects of modern technology and "ideological dialogue" later on. Possibly, the common primary concern of all genuinely philosophical and genuinely systematic philosophers with a long tradition of ambiguous "proportionality" -talk gradually help, through widening ordinary men's education in serious philosophy, to change the Spirit of the Nations. Careless polemics would seem rather less promising.

III. *"A Just War Uses Means Proportional to the Ends"* ¹⁶.

It never becomes clear exactly what Wells thinks he is "attacking" when he lashes out at "proportionality" as a Thomistically inspired criterion. Perhaps the fault lies as much with a long tradition of ambiguous "proportionality" -talk as it does with him. At some places in the verbal fog we suspect that he is again committing confusions (Conf- C) and (Conf- D), confusing (Conf- v) alleged necessary conditions with (Conf- vi) non-alleged sufficient conditions, confusing (Conf- vii) alleged necessary conditions with (Conf- viii) assumed indications, etc. What he means by "proportionality" and what he has to say against it must largely be

¹⁸ See Wells, *op cit.* pp.

gleaned from the following two vitriolic passages (the least emotional parts of this section). He begins the section by writing:

Franciscus de Victoria had observed ... that if to retake a piece of territory would expose a people to "intolerable ills and heavy woes" then it would not be just to retake it. We must be sure, he continued, that the evils we commit in war do not exceed the evils we claim to be averting. Now how do we measure the relative ills? This is the problem of the hedonic calculus on which Mill's system foundered. Since Victoria granted princes the right to despoil innocent children if military necessity required it, it ceased to be clear what proportionality meant or whether any limit at all was being proposed.

In a recent paper on this issue Father John A. Connery stated that the morality of the violence depends on the proportionality to the aggression. What is required is some calculus to make this measurement. The latitude with which conscientious persons have interpreted this suggests (what was clear enough to Mill) that we possess neither the quantitative nor the qualitative yardstick for this decision. Pope Pius XII thought the annihilation of vast numbers of persons would be impermissible. John Courtney Murray thought this prohibition was too restrictive. (pp. 822-823)

And shortly afterwards we read:

Not only do Christian prelates seem a fairly callous lot, but the notion of proportionality has lost sense.

Where should we draw the line? Pope Pius XII decided that Communism was such a cosmic threat that atomic, chemical, and biological bombs could all be justifiably used. But where then is the proportion? (p. 823)

The idea of proportionality in Christian thinking derives partly from the Pentateuch but also very considerably from Aristotle's discussions of proportional justice in *Nichomachean Ethics*, V, 1130a1-1134a5. Rather than hasten to discuss whether Wells and the numerous people he denounces here have been true to the Pentateuch, or to Jesus' revisions of its moral approach, or to Aristotle and Aquinas, let us first note that Wells rightly links medieval problems about justifiable violence in war with medieval problems about justifiable violence in

punishment.¹⁷ We shall next try to isolate what is wisest in the long tradition of talk about proportionality and violence by distinguishing two vastly different "proportional" approaches to violence. Here we shall be making some use of A.M. Quinton's classic analytical paper "On Punishment,"¹⁸ not necessarily a use that he would entirely approve of. At the risk of making this journal read like a philosophical horror comic, we shall baptize these approaches (Ap-1), or "The Retributive-Deontological-Isomorphic-Proportionality Approach," and (Ap-2) or "The Teleological-Estimate Reasoning-Sense of Proportion Approach."

Approach (Ap-1) states that *if X commits a wrongful violent act of form F.. and gravity G.. against Y, then Y and/or his lawful legates (such as his fellow citizens or his widow and orphaned children) may-just-because-he (or his legates)-just-may-and/ or must-just-because-he (or his legates)-just-must impose upon Y a violent penalty which is as closely as is humanly achievable of form F.. and gravity G...* The variables X and Y can have individuals, families, tribes, or other groups within nations, as well as entire nations, for their values. The variables Fn and Gn can range over the forms and gravities of thefts, rapes, tortures, maimings, murders, destructions of property, civil insurrections, invasions by other nations, etc.

Approach (AP-2) states that *if X commits a wrongful violent act of form F.. and gravity G.. against Y, and if such defeasible conditions as X's act being deliberate, X's being sane and adequately knowledgeable are met, then X should be punished (civilly, martially, etc.) but only if (i) some appropriate and important good end(s) will thereby be served and (ii) no greater evil consequence will result and (iii) the form and gravity of the punishment to be prescribed is properly judged by an agent or body with a wise "SENSE OF PROPORTION" regarding the gravity of X's act, the importance and further beneficial effects of the good end(s) served*

¹⁷ Cf. p. 820, para. 4.

¹⁸ *Analysis*, XIV (1954), 512-17. Reprinted in *Contemporary Ethical Theory*, ed. Joseph Margolis (New York, 1966), pp. 474-84.

and the possible harmful by-products of the punishment. Here the variables can range roughly over the same things as in (Ap- 1), but the wiser the approach to the Approach the more carefully the range will be reflected on and controlled. Approach (Ap- 2) retains an important retributive element from Approach (Ap- 1). It does not prescribe "tellingness." It does not license pseudo-punishments. It does not encourage pseudo-retributive violence against innocent but irritating persons and groups merely on the grounds that a greater balance of good ends will be served in the long run. As Quinton would put it: punishment must be *for* guilt-personal or governmental guilt.

Insofar as Wells seems to be addressing himself to proportionality *qua* Approach (Ap-1), he is addressing himself to something which Jesus himself often seemed very eager to eject from monotheist morality. (See the Gospels' versions of the Sermon on the Mount, especially Matthew 5). But Wells might rightly reply that sometimes Christian leaders, philosophers, and laymen have lapsed back in their thinking into some such "isomorphic" forms of really barbaric, irrational, infantile retributivism. This may be especially true of certain sadomasochistic and crudely pictorial interpretations by Catholics and Protestants of "estrangement from God" in the Afterlife.¹⁹ And lapses back into such infantile forms of irate isomorphism also characterize the darker side of humanity, whatever its creed, when men, even very good men, think about the justification of violence in war and in civil and family punishment. At any rate, insofar as Wells is addressing himself to Approach (Ap-1) or something like it, he is himself lapsing into barbarism by the kind of "arguments" he apparently uses against it. The rational answer to (Ap-1) is not to suggest first that "What is required is some calculus to make this measurement" (p. 823) and then to claim that we can no longer make such measurements, that perhaps one could

¹⁹ Wells, in making such a reply as this, could turn to the Nietzsche of *On The Genealogy of Morals* to support his contention.

in feudal times when an army's retributive volleys would not hurt civilians, but not now, and so on.

Nor is it a rational argument to suggest that ideally such a deontologically-minded and isomorphic-retribution-minded measurement of proportion might be made to good purpose by genuine saints, then to add that actual prelates and rulers do not measure up in their mental and moral powers to the standards of such saintly measurers. Surely *one* rational reply that Christians, Jews, and other religious folk, as well as secular humanists should make is this. "Approach (Ap-1) is infantile, barbaric, inhuman, immoral, irrational. **It** is contrary to the Natural Law and the Golden Rule and the Rule of Love and the Categorical Imperative, if you believe in any of these. In secular talk, it is contrary to certain basic human intuitions of decency and respect for all persons, which are sound intuitions and count as moral knowledge even though they often need to be socially nurtured. To try to attack Approach (Ap-1) philosophically *after* accepting its insane terms of mensural reference is itself a form of philosophical insanity. This might be called a dogmatic reply, not an argument. But sane arguments, as St. Thomas saw-and as very varied philosophers like Plato and Aristotle, Marcel, Marx and Moore have seen-must start with the acknowledgement of certain hard truths grasped in human experience, including moral truths."

Insofar as Wells seems to be addressing himself to proportionality *qua* Approach (Ap- 2) or something like it, he seems to *presuppose* the wisdom of using (Ap- 2) today in order to show that it is unwise today. For his main "argument" seems to be that the arrival of nuclear armaments makes it impossible for us nowadays to advocate rationally *any* form of martial violence on *any* scale. Why? Because (Premise a) no one with a sane "Sense of Proportion" about ends and means can advocate an *all-out nuclear* war in which vast numbers of non-combatants will be killed. Because (Premise b) many of the political and religious leaders to whom we once tried looking for improving our "Sense of Proportion"

about war obviously disagree widely with one another and obviously diverge greatly in view from what we ordinary mortals know that someone with a sane "Sense of Proportion " would have to believe and have to reject on such matters. These two must be among his real premisses. But how can such a general conclusion about all future warfare in any form conceivably be delivered by such premisses about nuclear warfare and the limitations of some leaders? A hidden assumption seems to be (Premise c) that, because we ordinary mortals, unlike so many leaders, can and do retain a " Sense of Proportion" about means, ends, and violence, we can see (or, be philosophically brought by Wells to see) that in a nuclear age no one does or can retain a "Sense of Proportion " about means, ends, and violence of any kind! This self-contradictory assumption goes perhaps together with another hidden and conflicting assumption (Premise d) that we the powerless still have enough " Sense of Proportion" to see that if any individual obtains political or martial power in a so-called Military-Industrial-Complex, it corrupts his "Sense of Proportion " absolutely. Such assumptions would seem to be needed as premisses to explain why Wells arrives at his moralisms so confidently. This wild assortment of conflicting premisses may help to explain the tangle of Wellsian confusions that we discussed in Section I. This tangle in turn may help to explain the conflicting premisses.

IV. *Farewell to Anti-Martial Muddles?*

Wells goes on to pour scorn on two of McKenna's other neo-Thomist conditions for justifying wars. These are (5) that use of war must be a last resort (pp. 824-826); then finally (6), that the participants must have right intentions. (pp. 826-829) But these discussions involve essentially the same kinds of confusion we have already tried to diagnose: muddles about necessary conditions, sufficient conditions, and useful (usefully relevant) indicators; muddles about sorts of "proportional" retaliation, etc. He makes, in effect, the useful

point that those with a "Sense of Proportion " ²⁰ should seek to study far more alternatives to a further arms race than the nuclear powers encourage their citizens to study. But this very point is largely made by utilizing assumptions shared by Christians about moral knowledge, about a "Sense of Proportion " arising from man's Natural Light of Reason, about our remaining ability at least dimly to distinguish justifiable from unjustifiable violence in the pursuit of various *modern* ends. Wells seems unaware that he may well have been helped to grasp some of his wiser, more "relevant" assumptions by being born into a culture with a considerable Christian tradition, a culture shot through with Aristotelian and Thomist ideas derived through Hooker and Locke and then the authors of the American Constitution. Wells appears quite bizarrely unaware of such a possibility-especially because he has so little but evil to say of Christian thinkers' " relevance " to the modern world.

At this late stage we had better confess again to a sociological prejudice. We have not attacked Donald Wells's essay on the "Just War" as a purist exercise in analysis. We have attacked him because we suspect that he is very much a man of our period, that his confusions about war and justification may be widely shared and shared at times by ourselves as men of the same period. But part of the task of a *philosophia perennis* which Christian analysts can endorse should be to dredge up such confusions about matters so crucial to human politics and morality. Then the confusions can be criticized in the light of several analytical traditions: classical, medieval, rationalist, empiricist, pragmatist, and modern. All the the traditions are relevant to man and to his most important questions about his existence.

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•• This extremely valuable term in ordinary language " A Sense of Proportion " (which is not a literalistic mensural term) is, unfortunately, not used and discussed in Wells's essay.

NEO-DARWINIAN REACTIONS TO THE SOCIAL CONSEQUENCES OF DARWIN'S NOMINALISM

IN OUR TWO previous articles in *The Thomist* ¹ some of the pros and cons concerning Darwin's special theory of evolution were considered. Indeed, scientists today are still debating whether evolutions or revolutions dominate in the production of natural changes. Statements such as the following seem to allow much room for either or both: "Evolution implies directed change. There is not and never has been, in neo-Darwinian thought, any quibble about the fact that change must come from random mutation at the molecular level. ... We do not regard perpetuation of neutral mutations as being evolution per se, but merely the pool from which evolution can occur, given a directed push by natural selection." ² Underlying the above statement is a whole new perspective on Darwin's original hypothesis. Much of the newer viewpoint has come about through both the introduction of new data and the need to "humanize" the original Darwin. Here we will be concerned with the latter.

1. *The Problem Inherited From Darwin.* Along with the many new directions Darwin's works have given to modern biology there have also passed into our century several problems initiated, or at least made prominent, by the writings of the Englishman. One such problem, perhaps the most widely discussed in one way or another, is generally referred to as the problem of social Darwinism. This problem came to widespread popular attention directly as the result of Darwin's espousal of a certain epistemological position which he claimed,

¹ *The Thomist*, XXXIli (1969), "Darwin on Evolution: A Re-Estimation," pp. 456-496; "Evolution After Darwin," pp. 718-786.

* From a letter to the editor, *Science* (August 1, 1969), p. 448.

without himself ever realizing its full philosophical history and import, was a necessary presupposition for the acceptance of his special theory of evolution. The particular epistemological position he espoused was one of the classical answers to the so-called problem of universal predication.³

2. *The Problem of Universals.* Perhaps the best way to put the problem is in the form of a question: How is it possible for one and the same term to apply equally well to many obviously different concrete entities? Or how is it possible to ever, at any time, use terms univocally? The use of univocal language is, of course, absolutely necessary to the sciences of logic and mathematics. And, insofar as the reasoning in any science is to be carried on logically or is to employ mathematics, that science also depends upon univocal language. The fact of universal predication, then, is common to all the sciences and is the beginning of the problem of universals *quoad nos*.⁴ How, for example, can one say that Tom is a human being, Mary is a human being, etc., and understand human being in

• Darwin's nominalism is quite well known among outstanding modern biologists. E. Mayr, for example, states that the modern, synthetic theory of evolution depended for its growth upon mainly "the rejection of two basic philosophical concepts that were formerly widespread if not universally held: preformism and typological thinking." (*Animal Species and Evolution*, Cambridge, Mass. [1963], p. 4.) Although Mayr is historically inaccurate on at least two points (preformism was held as a scientific doctrine; nominalistic positions were quite widespread, especially in England), his recognition of the importance of typological thinking in holding back slow change theories is accurate.

• The question of whether or not universals exist, and if so how and where, is a later issue, one which arises in the process of attempting to solve the initial problem.

The initial, logical, problem: How can we predicate univocally? The answer is that the subjects are identical in that respect. The metaphysical problem: How is such a thing possible or what is the nature of a class? Answer: An archetype in God; an individual essence in the thing; a concept in the human knower. Of course, many biologists find such an answer unscientific. R. Munson, for example, who wants more morphology in taxonomy, is as much a positivist in this regard as is, for instance, H. Lehman, who wants to emphasize the more hidden gene pools. Munson states: "Most would agree that Mr. Lehman's critique of the typological concept is judicious and correct." ("Biological Species: Mr. Lehman's Thesis," *Philosophy of Science*, 37 [1970], p.

the same way in each case even though each person is separate and individual? How, again, can one say that a certain substance on earth is water, a certain substance on Venus is water, a certain substance on Mars is water, etc., even though the samples are separated by millions of miles?

With respect to the biological sciences, Dobzhansky, for instance, takes it as both an intuitive conviction and a fact of experience that there are kinds or classes of things in nature. Furthermore, these distinctions among classes of living things are not merely differences of degree.⁵ To this eminent biologist,

The living world is not a single array in which any two variants are connected by unbroken series of intergrades, but an array of more or less distinctly separate arrays, intermediates between which are absent or at least rare. Each array is a cluster of individuals which possess some common characteristics. Small clusters are grouped together into larger secondary ones, these into still larger ones, and so on in an hierarchical order.⁶

The world, he goes on, is not a formless mass of randomly combining genes but rather a great tapestry of related families arranged on a large but finite number of adaptive peaks. Each living species occupies one of the available peaks while the adaptive valleys below are deserted. Such clusters or species or peaks are there, he insists, whether or not the classifier is looking for them. The problem of universals, then, with respect to biology, asks how such classification is possible given the vast plurality of living creatures in the world around us.

3. *The Classical Solutions.* The problem of universals has been of great interest to philosophers since at least the time of Plato.⁷ It would appear, though, that Darwin was neither aware of this great tradition in Western thought in which he played a role nor interested in becoming aware of it. This is

⁶ See T. Dobzhansky, *Genetics and the Origin of Species* (3rd ed., N. Y., 1951), p. 259.

• *Ibid.*, p. 4.

• See R. I. Aaron, *The Theory of Univall'Tsala* (2nd ed., Oxford U. Press, 1967).

simply to say that he was not a professional philosopher. For, indeed, it is hardly possible to imagine a self-conscious and serious philosopher avoiding for any great length of time the area of epistemology and its key issues.

There have been in the course of Western intellectual history four main answers to the problem of universals. One of these is traditionally known as Realism. According to this doctrine, one must postulate the real separate existence of the thing said equally well of diverse objects. Hence, as with Plato, one would say that somewhere in a separate heaven of existence outside the last sphere of the material universe there exists the One Perfect Triangle, Justice Itself, the One Perfect Man, etc.⁸ All men on earth, for instance, are considered to be only reflections of, or participations in, this One Perfect Man or Ideal Essence of Manness. Therefore, to say that Tom is a man means that Tom is similar to the One Perfect Man, a mere reflection of the Perfect Man's perfection. For Plato, the Idea of Manness was not itself universal, i.e., it was not actually all men, it was not both one and multiple at the same time and in the same respect. *Per se* it was singular; multiplicity came about by participation.⁹

Another proposed solution to the problem of universals is what may be called a Moderated Realism. According to Plato's analysis of knowledge, each Idea was divine, perfect, unchanging, existing in its own right. These Ideas form a hierarchy, a Realm of Ideas, for, as anyone who has reflected upon intellectual knowledge knows, some universal ideas are more universal than others, i.e., some terms are more comprehensive

⁸ See *Phaedrus*, b-e.

⁹ See *Cratylus*, 440 a-d. Another position, of minor importance, might also be listed. William of Champeaux maintained for a short time that extramentally universals exist *qua* universal. This meant that one man was actually all men simultaneously. It did not take long for Abelard to ridicule this view to death. See E. Gilson, *History of Christian Philosophy in the Middle Ages* (New York, 1955), p. 154 and "The Glosses of Peter Abailard on Porphyry," *Selections From Medieval Philosophers* (ed. by R. McKeon, New York, Vol. I, p.

than others. This whole hierarchy, for Plato, also had a separate existence.

Now, according to many Christians who thought on the subject, such a situation was impossible. There is only one divine being, God. But a way was found both to salvage what was in keeping with experience in Plato's analysis of knowledge and to maintain a monotheistic theology. Such a solution to the problem of universals was to regard the Ideas, not as existing separately in their own right but as affectations of God, that is, as ideas in God's mind. The hierarchies in the world, both non-living and living, are the way they are, not because individuals participate in a self-subsisting Idea but because God has created them to be such after his own thinking on the matter.¹⁰

Such a view, it was thought, would adequately preserve our experiences of the world as composed of concrete entities, which are always individual and particular, as well as our experiences of having concepts or ideas, which are always universal insofar as their applicability to many diverse entities is concerned. The universality of ideation comes about in the process of knowing the nature or essence of something. According to Aquinas, for instance, the essence or nature of the known object is the same both inside and outside of the mind, thus assuring the objectivity of intellectual knowledge. What is different about them is their mode of existing: physically outside the mind and intentionally inside the mind. What assures the universality of concepts is the fact that two things, so to speak, equal to a third (the idea in God's mind) are, so to speak, equal to each other. Thus, a whole collection of individual, concrete objects can belong to the same species (and so on up the scale) because they all possess in common some factor exactly corresponding to an idea in God's mind. Although the number of *infima* species could be disputed, in general outline such an epistemological scheme of things was

¹⁰ See J. I. Conway, "The Meaning of Moderate Realism," *New Scholasticism*, 86 (1961). pp. 141-179.

held by most of the outstanding monotheistic thinkers during the Middle Ages, even including Abelard.¹¹

Another way to solve the problem, or at least attempt to solve it, was that approach characteristic of those who adhered to the metaphysical scheme of things traditionally known under the name nominalism. It is in this tradition that one finds Charles Darwin. Indeed, if one were a believer in historicism, one would say that it is what was to be expected, for among his intellectual forebears can be counted such well-known nominalists as Locke, Berkeley, and Hume.¹²

According to the solution embodied in Nominalism, it is improper to claim that one can apply the same term to a multitude of individuals in exactly the same way. To call Tom, Mary, Sam, and Jane human beings, for instance, is to do nothing more than to attach a name or label, or some other mark of identification, to a collection of diverse creatures with similar outward or internal characteristics. The traditional nominalistically oriented philosopher, the most classical case

¹¹ See *ibid.*, pp. 168-170. See the *Summa Contra Gentiles*, I, c. 54 for Aquinas's explanation of why God's having "ideas" does not destroy his simplicity.

¹² See Aaron, *op. cit.*, for a good account of this aspect of British empiricism. The popular tendency toward nominalism began with Occam. See Wm. of Ockham, *Philosophical Writings: A Selection* (ed. by P. Boehner, Indianapolis, 1964), pp. 85 ff. The view is now quite widespread. See e. g., *Concise Dictionary of American Grammar and Usage* (ed. by R. C. Whitford and J. R. Foster, New York, 1955), p. 26: "Classification. Grouping items on a basis of some similarity, as logical relation, physical resemblance, etc."

Its effect upon logic should also be noted. Cf. W. S. Jevons, *Elementary Lessons in Logic* (New ed., N. Y. [1914], pp. 101-102):

It is necessary to distinguish carefully the purely logical use of the terms genus and species from their peculiar use in natural history. A species is there a class of plants and animals supposed to have descended from common parents, and to be the narrowest class possessing a fixed form; the genus is the next higher class. But if we accept Darwin's theory of the origin of species, this definition of species becomes entirely illusory since different genera and species must have according to this theory descended from common parents. The species then denotes a merely arbitrary amount of resemblance which naturalists choose to fix upon, and which it is not possible to define more exactly. This use of the term, then, has no connection whatever with the logical use, according to which any class of things whatever is a species, provided it is regarded as part of a wider class or genus.

would probably be Roscelinus teaches that there is nothing really common to a collection of diverse, concrete individuals *except the name*. Given such a view, it is useless to seek the basis of classification extralinguistically. And, since the imposition of names is arbitrary, it is also useless to argue over what is or is not a true species. In reality there is nothing but a vast array of individuals, each totally unique, which may be arranged and rearranged at will to suit the purposes of the classifier. As one can see, the doctrine of Nominalism lies at the opposite extreme from that of Realism.

A variation on this third view also constitutes one of the classical solutions. It is a Moderated Nominalism traditionally known as Conceptualism. It appears that such thinkers as Occam and Sir W. Hamilton (1788-1856) advocated such a solution to the problem of universals. Conceptualists say that there is more to the meaning of a word than a mere name covering a collection of sense data. However, the more is not outside the mind (as a realist would say) but only in the mind. In other words, one could, because of an identity of meaning within the mind, apply the same term equally well to many different individuals even though, in reality, there is not an essential sameness among the individuals themselves.

The building up of the concept unit, however, comes about in the same manner for the conceptualist as for the nominalist, namely, by a constant repetition of sense experiences showing the knower similar characteristics and activities on the part of the items later classified. There is a basis in extramental reality for the identification made intramentally, but the identity itself is purely intramental; it is an accident or affectation of the knower; it is not based upon an unchanging archetype. For a conceptualist, saying Tom is a human being or Mary is a human being means that they exhibit *at this time* certain characteristics which may be mentally identified. Tomorrow, however, the whole situation may change.

4. *DaIWin's Nominalism*. Darwin's epistemological preferences show up quite early in his *Origin of Species*. In Chapter

II, dealing with the wide range of variations met with in nature, Darwin has occasion to discuss the constant haggling among naturalists about what is and what is not to be considered a species or variety. Darwin does not hesitate to show his dissatisfaction with the whole business and concludes the section by saying:

From these remarks it will be seen that I look at the term species as one arbitrarily given, for the sake of convenience, to a set of individuals closely resembling each other, and that it does not essentially differ from the term variety, which is given to less distinct and more fluctuating forms. The term variety, again, in comparison with mere individual differences, is also applied arbitrarily, for convenience' sake.^U

Later, when summarizing the evidence for his special theory of evolution, Darwin gives the reader his position again in a clear fashion:

On the view that species are only strongly marked and permanent varieties, and that each species first existed as a variety, we can see why it is that no line of demarcation can be drawn between species, commonly supposed to have been produced by special acts of creation, and varieties which are acknowledged to have been produced by secondary laws.⁴

The Englishman's program of erasing boundaries among living creatures and melting the biosphere into one flowing mass of unique, interacting individuals did not stop at man. In his *Descent of Man* Darwin states that it is equally difficult to decide where non-man ends and man begins.

In a series of forms graduating insensibly from some ape-like creature to man as he now exists, it would be impossible to fix on any definite point when the term "man" ought to be used. But this

¹³ C. Darwin, *The Origin of Species* (6th ed., Modern Library ed.), p. 46. D. L. Hull, "The Metaphysics of Evolution," *The British Journal for the History of Science*, 8 (1967), pp. 809-887, claims that Darwin was not definite concerning the status of species but rather took an amorphous position somewhere between the realists and nominalists. However, regardless of what Hull thinks, Darwin's position according to his own words was nominalistic.

^u Darwin, *op. cit.*, p. 860.

is a matter of very little importance. So again, it is almost a matter of indifference whether the so-called races of man are thus designated, or are ranked as species or sub-species; but the latter term appears the more appropriate.¹⁵

As a side effect of his espousal of nominalism Darwin foresaw a great benefit for systematists. No longer must they argue over what is or is not a true species. All they would be called upon to decide is whether or not the observable differences among different forms are sufficiently great to deserve a specific name. Once it is realized that what is called a class is merely a collection of individuals arbitrarily linked together on the basis of an arbitrary standard, the progress of biology would be secured.¹⁶ But how then can the biologist talk about horse, elephant, dog, cat, man, etc.? The nominalistic answer is that among all existing creatures some bear greater resemblance to each other than to others. When such similarities are recognized by someone interested in looking for them a label or name is arbitrarily chosen and used to cover the whole group.

5. *The Social Consequences.* The implications for social inter-relations of the original Darwinian position on species are quite well-known and need not be labored over here. In a system where along the entire length and depth of the great chain of being there are no ontological breaks from the first few protein molecules up to the level of man, much room is left for speculation as to what creatures are truly superior with respect to other creatures. For Darwin, the only difference between a species and a variety is that varieties are still seen to be connected by intermediate forms while species are not. At one time or another, however, all creatures were connected by intermediate gradations. The fact that many intermediary groups have died out, leaving the impression that certain

¹⁵ Darwin, *The Descent of Man* (2nd ed., 1874, Modern Library ed.), p. 541.

¹⁶ See Darwin, *The Origin of Species*, p. 871. Cf. Chapter 14 wherein Darwin presents his own method of classification based upon common parentage as revealed in family resemblances of various kinds.

groups (species) are somehow precisely and eternally set off from one another, does not detract from the fact that the primates developed by a countless number of small steps from the lower biosphere.

What this means is that even at the upper end of the scale there are many gradations. With respect to the human species it means that there is no such thing as *the* human species. There are only groups of creatures which more or less resemble each other. There are creatures which are not fully men, more fully men, and fully men. And no naturalist, or systematist, or philosopher can say where one ends and the other begins. Consequently, since we think nothing of putting monkeys into cages for our amusement, why could we not put certain aborigines into cages for the same reason? They certainly are closer to the monkey than we are. And what is to prevent the caucasian, who is superior to the mongolian or negro (who is to say that he is not?), from exploiting these other groups just as they in turn use other creatures which *they claim* are inferior to them. The result, of course, is that all systems, whether religious, political, or economic, built upon the premise that one must help his fellow human beings, become so restricted as to be meaningless since everyone is now free to decide what is and what is not a human-type creature. All sorts of totalitarian regimes are *justified* and there is no longer any reason to be horrified as one human cuts up a semi-human in the inevitable struggle for life.

6. *The Two-Fold Approach of Neo-Darwinianism.* Understandably, a good number of modern biologists in the Western world, finding that they must spend a good deal of time living among all sorts of their fellow creatures, outside of the laboratory as well as inside, are fearful of the consequences of consistently applying Darwinian views in their everyday lives. But how does one avoid such consequences? There are various methods available.

Undoubtedly the simplest method of removing a difficulty, or a least pretending to do so, is to ignore it. Such an approach,

however, is hardly worthy of consideration, even though many biologists today, who are much more interested in getting on with their day-to-day work than they are in such issues as the problem of universals, as a matter of fact do use such an escape route. But when they do begin thinking about such issues, what approaches would they be most likely to take?

The developments in neo-Darwinian theory relative to our topic which should be given careful consideration have taken two main avenues. One I have designated the general solution to the problem of universals, and the other I have named the special solution. These two approaches toward a solution of the consequences of Darwin's nominalism are logically independent of one another, i. e., one is not a necessary presupposition of the other nor is one a deduction from the other. *De facto*, however, they are usually seen keeping company. Although not necessarily the case, there does appear to be an historical unity present in that those adhering to the more general approach will also be found supporting the more special solution.

Naturally, no commentator is in a position to judge the inner motivations of individual biologists. One cannot say that some particular thinker was led to propose, elaborate, or accept the general neo-Darwinian view or the newer theory of speciation primarily to avoid the unwanted social consequences of Darwin's nominalism. However, these newer developments can be used, and have been used, by many theologians and philosophers, as well as scientists, to circumvent such difficulties. Our main concern, then, is not to pass judgment on individual motives but merely to see whether or not either or both of the solutions will measure up to such an end, assuming they the main points:

7. *The General Solution.* It is common today to find neo-Darwinian theorists claiming that natural selection does not operate upon the individual creature as a whole, in the sense that it must win the fight for life here and now with another creature or some other aspect of its environment, but upon the random mutations suffered by the creature. The mutations,

so to speak, are the original script while natural selection, so to speak, is the editor. Also, there is no orthogenesis, i.e., the mutations taking place are not ordained to any pre-established end result. This is what is meant by mutations being random. The mutations themselves are very small and minor when considered alone and need not favor the survival of the creature at the times they occur. In fact, all evidence points out that mutations which can be observed today are detrimental to the well-being of the creatures in which they occur. To get around this fact, modern evolutionists usually claim that the lack of survival value of observable mutations is so only relative to our present environment. If the environment were to change, it is claimed, the detrimental mutations might well prove to be beneficial. The over-all appearance of the mutations-environmental change process, though, is one of slow progress. Dobzhansky, in his typically clear style, gives us the main points:

The statistical probability of survival or elimination, despite accidents, will depend on the degree of the adaptedness of individuals and groups to the environment in which they live. This degree of adaptedness is in part conditioned by the genetic endowment. Therefore, carriers of some genotypes will survive, or will be eliminated, more or less frequently than will the carriers of other genotypes, and the succeeding generations will not be descended equally from all the genotypes in the preceding generations, but relatively more from the better adapted ones.^H

According to the neo-Darwinian approach to evolution in general, one must believe in a dependence of higher levels of perfection upon an entirely chance process of a type never dreamed of by Darwin. To claim that environmental changes account for the adaptedness (i.e., the survival for a while longer) of creatures with otherwise detrimental genetic endowment is to think, for instance, that the water-spider, which builds its nest under water and fills it with air by bringing the air down on its own body, somehow (through many

¹⁷ T. Dobzhansky, *Mankind Evolving* (Yale U. Press, 1962), p. 128.

NEO-DARWINIAN REACTIONS

generations) suffered a long series of minor genetic changes (no one of which need be of any immediate use to it-since, if one judges by current standards, they were detrimental at the time) which all led up to its present condition while still living on the surface. Given the right environmental change, however, the water-spider survived while its fellow spiders, without such (previously) detrimental mutations, died out. In this way, although detrimental to individuals, mutations are said to be advantageous to the species.

In a broad way, such a theory does offer a solution to the problem of social Darwinism. The main thrust of the newer Darwinian view of evolution *vis-a-vis* our present topic is to play down as much as possible the idea of nature as a bloody, mean affair in which individuals within the same species or in different species literally fight to the death with one another. The notion that all nature is a jungle, red in tooth and claw, has now been replaced with the more benign notion of differential reproduction. The idea that individuals or races must literally fight and maim and kill each other has now been replaced with the idea that some slight and minor variations within the genes of living organisms will ultimately give the offspring of those organisms so affected the right of survival with respect to other organisms not so affected. Certainly, survival is still the all-important criterion of success and, certainly, there is still much warfare to be observed in nature but no longer must it be thought that surviving demands the brutal elimination of one's fellow creatures. No longer must biology teachers leave their students with the impression that warfare must be deliberately and willfully fostered in order to assure the adaptation of the fittest. The elimination of the unlucky ones who lack the right genetic endowment at the right time in the environmental history of the world will, of course, still occur. But it will be a much more quiet and much less obvious process.

Some thinkers find the differences between the original Darwinian view and the newer Darwinian process great enough

to warrant a new name. J. N. Deely, for example, would replace the term natural selection, with its negative overtones, with the term evolutionary selection, which he feels conveys a much more positive and progressive connotation.¹⁸ The neo-Darwinian view of the struggle for survival would also seem to be the basis for a recent remark by Dobzhansky. With an air of approval, Dobzhansky states that "Teilhard rejects social Darwinism."¹⁹

8. *The General Solution Critiqued.* Considered from the point of view of what is peculiar to the neo-Darwinian position, as opposed to what it has in common with the older Darwinian program, there are at least three serious objections to the general neo-Darwinian solution. If what it has in common with the older view were to be taken into consideration there would be other noteworthy objections, but that aspect of neo-Darwinianism does not directly concern us here.

First of all, the general neo-Darwinian solution is at odds with the well-established principles of modern mathematical probability statistics. This is the only one of the three standard senses of probability which can be used in this context, since factual material and observations needed to ground the remaining two interpretations presently are not available. All advocates of the Darwinian theory readily admit that to believe that some complex organ, such as the human eye, fell together all at once accidentally would be scientific heresy. Also, most neo-Darwinians today do not make much use of large mutation jumps in their explanations. To believe that some large, complex mutation or co-ordinated set of mutations, resulting in some radically new function or organ, was neatly co-ordinated with some chance environmental change thus accounting for the survival of the creature is regarded as repugnant to sound scientific reasoning. These same people, however.

¹⁸ See "The Philosophical Dimensions of the Origin of Species," *The Thomut*, 33 (1969), p. US. Such views seem to be shared by F. J. Ayala, "Man in Evolution," *The Thomut*, S1 (1967), p. 10.

¹⁹ *The Biology of Ultimate Concern* (N. Y., 1967), p. ISS.

seem to think that a long series of minor genetic accidents, occurring throughout many generations, can somehow have been so correlated and in such a right sequence, although detrimental at the times of occurrence, so as to have produced more complicated and perfect creatures because some environmental change occurred at just the right time to favor their survival. One wonders if such a view has been adequately thought out. Given the many more factors which must be correlated, within a very precise and limited sequential range, the latter position is infinitely *less* probable than the two former positions.

Consider a situation in which one is expected to spell out the word *mutation* in our language by agitating a very large number of small entities imprinted with letters of our alphabet. Conceivably, after a very long period of time, one might get them or *mu* to fall into place. But what would be the mathematical probability that the *t* or *ta* would fall into place after the *mu*? The chances, of course, would be ridiculously small. Indeed, with continued agitation, not only would the *ta* not fall into its required place but the *mu* would fall out of place. To base a theory, then, which is supposed to account for the scientific intelligibility of the biosphere upon the chance mutations of a countless number of genes and chance environmental changes with which they must be co-ordinated is to completely disregard the modern science of mathematics.²⁰

In the second place, the advocates of such a position must contend with their colleagues in the physics department. In

²⁰ It is common to hear mathematicians complain that biologists either give insufficient information upon which to base calculations or, if some parameters are given, the calculations based upon them show neo-Darwinian theory to be inadequate. See *Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution* (ed. by P. S. Moorhead and M. M. Kaplan, Philadelphia, 1967). Were the specific objections answered? Not really. See the review of J. L. Harper, *Science*, 160 (April 26, 1968), p. 408. Some scientists, hoping to avoid such problems, think it best to introduce all sorts of "cheaters" into the calculations, thus making pure chance into non-chance. See Waddington's remarks in the above volume and J. Bronowski, "New concepts in the Evolution of Complexity," *Synthese*, 21 (1970), pp. 242-243.

physics we learn that entropy is the name given to the ratio Q/T where Q is the quantity of heat energy transferred and T is the absolute temperature at which the transfer takes place. In the process of actually measuring entropy, however, it is only the change in the ratio which can be observed. The measurement of this is based upon the initial and final states of the system measured and need not be concerned with the absolute limits. Entropy is found to increase whenever a body's available energy decreases or its internal disorder increases. Conversely, whenever available energy increases or internal disorder decreases (e. g. in freezing) entropy decreases. As far as anyone can tell today, the overwhelming rule in the universe is the loss of available energy and increasing disorder so that the total entropy in our world is forever increasing.

It might be urged at this point, especially following the work of von Bertalanffy, that the classical law of thermodynamics must be modified so as to take into consideration open systems in non-equilibrium as well as closed systems (e. g., thunderstorms) in equilibrium. Consequently, today, the known physical law is that there is a general increase in entropy, but this is the over-all result of a balancing of increase and decrease (in living creatures and in some aspects of the geosphere). However, even granting that such is the case, and that the new more general law of thermodynamics cannot be used *against* the theory of common descent (in part), it is equally true that it cannot be entered as evidence *for* the theory. The situation for past time, though, is quite different. Assuming that life had a beginning on earth, and that the classical law of thermodynamics that would hold now held then, increase must have been the overpowering rule (since there were no life processes to counterbalance it). This means that even though there was not a reversal of the presently stated law there was of the then operative law.

Third, one would expect that, according to the mutations-environmental change theory, assuming that the rate of random genetic alterations is about the same all over the world, there

would be more species and more variations within species in those areas where environmental changes are more frequent and more severe. This, however, is not the case. According to a recent article by three geologists, the number of different species and variations thereon decreases as the distance from the equator increases. While they admit they have no proof, the authors believe that the greater taxonomic diversity in the tropical regions is due to the higher and more constant solar energy level existing there. They do not call upon the neo-Darwinian general solution for an explanation. Given the fact that environmental changes have been generally more frequent and severe in the temperate latitudes it is understandable that they would not have done so. **If** anything, their research would seem to support a revolutionary view of change, due perhaps to large scale mutations, rather than one of the slow change theories.²¹

²¹ See F. G. Stehli, R. G. Douglas, N. D. Newell, "Generation and Maintenance of Gradients in Taxonomic Diversity," *Science* (May 23, 1969), pp. 947-949. Despite the terminology, revolutionary change theories are more popular than one might think. A. M. Brues, for instance, thinks that "evolution" was dependent upon occasional "good" mutations. See her "Genetic Load and Its Varieties," *Science* (June 6, 1969), p. 1130. Advocates of the neo-Darwinian schemata would make their case much more palatable to the critically minded if they were to avoid fairytale-like narrations such as the following: "The 'discovery' of respiration by lungs permitted the descendants of a certain kind of fishes to emerge on land, to exploit its food resources, and to evolve into amphibians. Most amphibians continue, however, to be dependent on water for their developmental stages (tadpoles). This dependence was cast off by the 'invention' of eggs protected by shells, inside of which the embryonic development is completed. The family of amphibians which in its 'gropings' hit upon this 'invention' evolved into reptiles. Some of the reptiles live in driest deserts, and many of them take no liquid water at all, deriving their entire water supply from the food they eat. The next key acquisition was probably that of the physiological mechanisms which maintain a constant body temperature regardless of the temperature of the environment. This may have happened independently in two groups of reptiles, which gave rise respectively to birds and to mammals. Birds developed flight and the ways of life made possible by flight. Mammals evolved a complex physiological machinery for the development of their embryos inside the mother's body, for feeding the infants on milk, and for parental care. These innovations were accompanied by increases in ilie brain size and by growth of mental abilities." (*The Biology of Ultimate Concern*, N. Y. [1967], pp. 129-130.) The story is a little too pat. **It** sounds more like the tale of the brave knight riding through the

9. *The Special Solution.* In contrast to the general solution, the special solution does not involve a general reorientation of the whole Darwinian mode of thinking concerning the slow changeover of species. It could, in fact, be used in conjunction with the old Darwinian system. The main thrust of the special solution is to establish a criterion for determining species, within the framework of what its advocates consider to be acceptable scientific boundaries, which will allow all creatures presently regarded as human beings to continue to be so regarded, even though the general Darwinian or neo-Darwinian scheme of things is followed. If this could be accomplished, one would then have a basis for arguing that some universal code of ethics could reasonably be established forbidding such things as murder, rape, slavery, etc., among members of the same species.

The program of the special solution is to reestablish the notion of species on some grounds other than the classical solutions. What those advocating the special solution hope for is an explanation of species that is both concrete, meaning opposed to the immaterial idea-isms entailed by the realistic answers, and non-arbitrary, meaning opposed to the consequences of the nominalistic and conceptualistic answers.

The core of the hoped-for solution is to regard a species as the development of a reproductive isolationism between Mendelian populations. As a result of such isolation each member of the group possesses a common essential set of genes which is always expressed through interbreeding. It is not necessary that all members actually interbreed but only that such interbreeding is possible.

Hugh Lehman, following other gene theorists, favors this "gene-pool" theory of species. One species differs from another because there is some mechanism *in nature* which prevents

enchanted forest on his way to progress and happiness with the beautiful princess than a scientific account of history. There are, of course, obstacles along the way, but these are conveniently done away with by magic swords, frogs that are really good elves in disguise, etc. Counterparts in the theorizing of some modern Darwinians are all too easy to find.

creatures coming from one type of gene-pool from interbreeding with those from another. This theory, of course, will only work with sexual species.²² In the case of sexual creatures, a gene-pool is defined by Lehman as "the most inclusive group of breeding populations between which interbreeding sometimes occurs in their natural setting."²³ To make the gene-pool theory work, then, it is necessary that there be no interchange of genetic material between distinct gene-pools. This is shown to the biologist, and preserved in the species, by one species' failure to successfully interbreed with other species.

As it happens, the gene-pool theory of species is also held by most other outstanding advocates of the general neo-Darwinian view on the mechanisms of species transformation. E. Mayr, for instance, tells us:

Although the evolutionist may speak of broad phenomena, such as trends, adaptations, specializations, and regressions, they are really not separable from the progression of entities that display these trends, the species. The species are the real units of evolution, as the temporary incarnation of harmonious, well-integrated gene-complexes. And speciation, the production of new gene-complexes capable of ecological shifts, is the method by which evolution advances.²⁴

And, as J. R. Beaudry relates:

The distinctness of the individuals does not destroy the reality of the mass, since the individuals are not independent but are all interrelated in space and in time by physical links, in the form of gametes, which transmit the essential sets of genes to the distinct parts. The existence of a multiplicity of these different essential sets of genes is expressed through different integrated

Most modern biologists will admit that arbitrariness and subjectivity cannot be avoided when classifying asexual creatures. See E. Mayr, *op. cit.*, pp. 27-29.

Lehman, "Are Biological Species Real?" *Philosophy of Science*, 34 (1967), p. 164.

•• E. Mayr, *op. cit.*, p. 621. Mayr would define a species as a relation. See his "Footnotes On The Philosophy of Biology," *Philosophy of Science*, Vol. 36 (1969) p. 198.

groups of external and internal characters, which are often sharply discontinuous but not completely so.²⁵

But how do new species develop? In order to survive (adapt) an organism must have a gene-pool which will give it the internal and external physical characteristics needed to adjust amid changing ecological conditions. Now, according to the special solution, observable characteristics are decided by genes. Everything then comes back to the genes, which themselves cannot be observed. One is therefore forced to work indirectly with genes and directly with what can be observed. This means observing interbreeding and phenotypical characteristics.

The over-all result of such an approach is that, when talking about a species, the modern systematist is not talking about an individual's matching some ideal type but rather as belonging to a population. The characteristics of a population are those of all its members taken collectively. There will be an average condition but no single ideal pattern. The notion of types has been eliminated. One must imagine instead a sort of statistical bell curve with the various individuals constituting the population spread out along vertical lines going up to the curve from a base line. The members are grouped according to typical characteristics so that those in the middle will represent the most common traits of a certain population (species). Toward the fringes there are deviations. **It** is from these deviations that new curves, representing new species, will come forth by the process of natural selection.²⁶ The key question, of course, is will the gene-pool theory of speciation work.

••J. R. Beaudry, "The Species Concept: Its Evolution and Present Status," *Revue Canadienne de Biologie*, 19 (1960), p. 225. See also F. J. Ayala, *art. cit.*, p. 15.

²⁶ See G. G. Simpson and W. S. Beck, *Life* (2nd ed., N. Y., 1965), p. 492. For greater detail see S. Wright, *Evolution and the Genetics of Population* (Vol. I, Chicago, 1968).

10. *The Conditions for Classification.* Let us analyze what happens in the process of classification. Suppose, for example, that one is a professor facing a class of students. Although he may have doubts from time to time, there is really never any question that the class is composed of human beings. If the course is in philosophy, the question concerning the justification for classifying all the students (and the professor) as human beings would sooner or later arise.

There are certainly numerous differences among the individual specimens. When surveying the human species as a whole, one finds that individual specimens run to great extremes—from three to seven feet in height, from chalk white skin to dark brown skin, from very thin to very fat, people with no legs, people with six fingers and people with no fingers, those with much hair to those with no hair, idiots and geniuses, the very weak and the very strong, etc., to say nothing about male and female. Yet, when classifying Tom, Mary, Sam, Jane, etc., as human beings, all of these differences fade into the background. But what exactly is it that does not fade into the background? Is it fitting within some preconceived (even if it is only a tentative decision) specified morphological set of dimensions? ²⁷ Is it some function or ability possessed by the specimens but not had by other creatures? ²⁸ Regardless of what standard or standards are used, however, it is clear that it must apply equally well to each and every human being.

²⁷ The specifications cannot be set up inductively, i. e., after an investigation of numerous individual specimens within the species because, obviously, to know that the specimens are in the species the specimens would have to be regarded as such before the various measurements (height, brain size, amount of hair, etc.) are made. Neither can the morphological criteria be some distinct or indistinct image or picture, for every image, even if it undergoes many and rapid changes, is at every moment just one image capable of fitting just one individual.

²⁸ In the Scholastic tradition of Aquinas, for example, speciation is decided upon the principle that actions follow upon nature, the secular version of the Biblical dictum "By their fruits you shall know them." Accordingly, judging by their acts, centaurs, mermaids, Mickey Mouse, Donald Duck, etc., if they possessed extramental existence, would be humans, i. e., internal and external physical appearance is irrelevant.

It is not the case that each student is more or less human than the others. There is rather some common denominator possessed equally by all.

To put it otherwise, while the students in the course are obviously differentiated by thousands of peculiarities both large and small, they are also alike in at least one positive way and this way, of course, cannot be the fact that they are all different. Although each one is the same as the others in being different, each one is also the same in being human. Now this likeness or similarity or family resemblance is something affirmed among individuals, not between an individual and the common trait. We say, for example, that Tom is a man, Mary is a man, etc., not that Tom is like a man, Mary is like a man, etc. Rather, it is the case that Tom and Mary are alike in being men. **I**f the likeness were between an individual and the common trait, the systematist would be in the embarrassing position of having to specify what it is that the specimens are like. That is, if Tom is like a man and Mary is like a man, one can rightly ask to be shown this man that Tom and Mary are like. Tom and Mary, in a word, are not like human beings, they are human beings. Consequently, in the process of justifying class membership based upon likeness or similarity one must be careful to indicate, once it is granted that the students are all alike in being men, precisely in what way the members of the population are identified as belonging to the same species.

By way of generalization, then, admittedly all classification is based upon similarity. But, to stop here would be to have performed an incomplete analysis. Similarity entails both difference and identity. **I**f the items to be classified were not different in at least one respect there would not be a plurality of items at all; there would be no question of classification because there would be no items to classify. Without difference there would be only identity. On the other hand, one must not overlook the need to search out the identity aspect among the items classified. Without identity in at least one respect

there would not be any classes or categories at all at any level; there would be no question of classification because each item in the universe would be totally unique, totally unlike any other item in the world. There would be plurality but no unity.

Hence, the two conditions for classification would be the following: (1) One must be able to designate in at least one respect how the items (at least two) are different from one another. (2) One must be able to designate in at least one respect how the items classified are identical with one another.

The next question that arises, after the identity factor has been established, is whether or not the identity is objective, i.e., existing independently of the knower, or subjective, i.e., a product of the knower's own thinking. The two realistic solutions to the problem of universals would make it objective, either by reference to a Realm of Ideas or to God. The two nominalistic solutions would make it subjective. The nominalist would say that the identity is only in the name, and naming is an arbitrary process entirely dependent upon the knower. Likewise, the conceptualist would say that to him, at this time, according to the idea he has formed, certain creatures can be put into the same class because to him they appear to have certain traits in common. And furthermore, it is just those characteristics decided upon by the conceptualist, rather than some others, which should be used as the basis of classification. Indubitably, in order to escape the undesired social consequences of Darwin's original nominalism, which gave scientific support to a totally subjective view of morality, the new solution must be objective. This does not mean that the new solution must be realistic, for it may have hit upon a basis for classification which is both concrete and universal. However, as we will see, the question as to the objective or subjective status of the special solution to the problem of speciation will not arise and is thus irrelevant.

11. *The Special Solution Critiqued.* The gene-pool theory of speciation suffers from several serious defects, some of which

are more scientific, meaning open to experimentation, and some of which are more philosophical, meaning more dependent upon reasoning alone without the need of laboratory experimentation. The more scientific objections are two in number, while the more philosophical number at least three.

With respect to the first group, it must be well-known to the advocates of the gene-pool theory that interbreeding or the lack of interbreeding is not a safe guide to species differentiation. A hundred years before Darwin's *Origin*, Buffon propounded his famous and immensely influential reproduction standard of speciation. In fact, one of the arguments used by Buffon against the possibility of species transformation was the infertility of hybrids. This same argument against the common ancestorship of several presently existing species was also used by Kant as well as by numerous other philosophers and scientists. The belief was so wide-spread that Darwin felt called upon to discuss the issue at length. In the course of so doing, he marshalled much evidence to show that members of supposedly different species can in fact produce offspring which are then also capable of reproducing under the right circumstances. His conclusion on the matter is that

With respect to the almost universal sterility of species when first crossed, which forms so remarkable a contrast with the almost universal fertility of varieties when crossed, I must refer the reader to the recapitulation of the facts given at the end of the ninth chapter, which seem to me conclusively to show that this sterility is no more a special endowment than is the incapacity of two distinct kinds of trees to be grafted together; but that it is incidental on differences confined to the reproductive systems of the inter-crossed species.

Modern experimentation has tended to support Darwin's view on hybridization. Thinking of a gene-pool as revealed by the most inclusive group of breeding populations, then, can be dangerous to a theory which hopes to supply a basis for a plurality of species. Under the right breeding conditions

•• Darwin, *The Origin of Species*, pp. 853-854.

the most inclusive group of breeding populations could well be expanded far beyond the limits that any working biologist would care to see set up. As unlikely as the prospect may sound at the moment, future experimentation may well show us the grandchildren of a man and monkey mating. According to the breeding standard of the gene-pool theory this would mean that we are presently mistaken in regarding men and monkeys as belonging in two different categories.

A second difficulty concerns the manner in which a gene-pool theorist would test for humanness when there is no possibility of testing for interbreeding. Imagine a case in which a specimen, either male or female, due to some physical defect, cannot interbreed or even attempt interbreeding. Would this make the subject non-human? It might be argued that the problem would never arise since in all cases the specimen would be the offspring of two humans. But where did the parents come from? Other humans? And their origin? Other humans. This, of course, will get us nowhere. If one is to look to filiation as the standard of species determination, one may know in what species a certain creature belongs, but in so doing the gene-pool theory becomes irrelevant. If one is to take Simpson and Beck seriously when they say that the best and only direct way taxonomist can be sure of species ties is that an individual is living with his own kind, then one is certain to be very much disappointed, for it turns out that the whole gene-pool theory is merely an especially involuted way of begging the question.³⁰

³⁰ See Simpson and Beck, *op. cit.*, p. 493. A subsidiary point might be injected here. One criterion used to determine the adequacy of a scientific theory is the degree to which the theory can assimilate much diverse information tangentially related to the core of facts and problems which originally gave rise to the theory. In this respect any one of the four classical solutions is superior to the gene-pool theory. How, for instance, according to the gene-pool theory, would a geologist distinguish one species of rock from another, or a chemist one chemical substance from another, etc.? In other words, the gene-pool theory is highly restricted (to sexually reproducing organisms). The others, however, were designed to be used universally. Mayr admits this (see *art. cit.*, p. 199) but takes it as a *strong* point of the theory!

Among the more philosophical problems with the special solution one must list the following. The first is one which is usually obvious to the philosopher but generally not so obvious to the biologist, who is raised and educated immersed in hordes of specimens. Namely, it makes no sense to talk as if a population of cucumbers, for instance, contained something other than cucumbers. A population or gene-pool, as an abstraction from individual specimens, is no more concrete than a species, which is also an abstraction when considered with respect to individual cases. **If** the systematist does not know what he is about beforehand, he will have as much trouble placing a given specimen in some population as he will have placing it in some species. Unless he has some idea (at least tentatively) about upon what he is going to use the various measuring techniques open to him before he begins to measure, he will be like the boy who was sent out to pick cucumbers but instead spent the day in the watermelon patch because, as he claimed, he didn't know the difference.³¹

The second difficulty in this group is concerned with an apparent inconsistency in the use to which advocates of the special solution put the complicated chemical entities called genes. **It** is typical for modern biologists to have recourse to gene differences to explain phenotypical differences. One person has blue eyes rather than brown because the genes in his particular genotype are dominated by genes producing blue eyes. A reduction in phenotypical differences, as in the case of twins, is said to result from the fact that the gene structures of the individuals involved are very much the same. Yet, amid their many gene controlled differences, the blue-eyed person and the brown-eyed person, the two twins, etc., are identical in being persons. **If** this identification, necessary for placing even two individuals in the same class, is to be explained by genes also, the critically minded inquirer is entitled to ask whether the genes used to explain the differences are

³¹ See note 27 above.

the same ones used to explain identity. If the same principles are to be used to simultaneously explain both diversity and identity, the gene-pool theorist is put into a rather peculiar situation. If different genes are to be postulated for each of the two functions, questions immediately arise as to exactly where the identity genes are located, how many are there, would having just one be sufficient to make a human human, and a host of similar queries. In the light of what follows, however, all such questions will be seen to be moot.

We now turn our attention to the main difficulty inherent in the gene-pool theory of speciation. The gene-pool theorists are on the right track, we believe, when they seek something giving more unity and uniformity than a phenotypical approach to species. Nevertheless, they fail to come to grips with the root of the problem. They seem to think that the problem of speciation can be resolved by replacing the term "species" with something such as "coming from a group possessing common essential sets of genetic endowments." Such an approach is thought to mean much more than merely a switching of labels, i. e., replacing "essence" with "gene-pool" or the like.

Now, the special solution's recourse to essential sets of genes is open to two interpretations. It can mean essentially the same genes (i. e., members of the same species have the same genes), or it can mean sets of genes which are essentially the same (i. e., members of the same species have a certain proportion of their genes which are of the same type).

If the former alternative is chosen, it must mean that there are some material entities (genes) which are somehow identical in each member of the same species. But this is surely impossible. Your genes cannot also be in me. Whether on the superficial phenotypical level or on the less obvious gene-pool level no two creatures have the same bodies. Gene structures, consequently, being complex chemical compositions, i. e., material parts of bodies, cannot be the same. There will always be at least a difference in space-time coordinates.

If the latter alternative is chosen we come upon another problem. To carry our analysis one step further, as tempting as the move might appear, one must avoid trying to solve the problem of speciation by moving to some lower, more fundamental level of material entities and seeking therein the identity factor required for classification. The general tendency since the beginning of our century has been to seek answers to biological issues by analyzing living organisms in terms of their smallest parts. The importance of the cell, recognized in the last century, has been augmented in this century by a rather thorough investigation of its parts, especially the nucleus. As a result, the nucleus has given way to many subdivisions, the chromosomes being of special interest. The most recent widespread trend has been to investigate living things in terms of their molecular structures. It seems likely that the next move will be to the subatomic or quantum level.

It is not difficult to see, however, that to employ quantum level entities as the core of a proposed explanation of speciation would be simply to continue the process begun when biological theorists moved from the phenotypical level to the genotypical level in their efforts to circumvent the problem of speciation inherited from Darwin. To try to answer the above objection to the gene-pool theory by claiming that certainly the genes in one human cannot be identical with those in another but that it might be possible for humans to have genes which are essentially the same, meaning that the genes have something in common,⁸² would be to raise the questions concerning in what way the genes are identical and in what way they are different. Although we are no longer talking about Tom, Mary, Sam, Jane, etc., belonging to the same species, we are still talking in the same pattern. This time around, however, one would be saying that genes (humanizing genes in this case) belong

⁸² This appears to be what Dobzhansky is saying when he states that "To be a man one has to have a human genotype, and an ape genotype will not do regardless of any amount of training and of any known environmental influences." (*The Biological Basis of Human Freedom*, N. Y. [1956], p. 25.)

to the same species, are of the same type, etc. But what is the basis for regarding them as belonging to the same population or class? It must be that genes of a certain type are of a certain type because they possess essentially the same. . . . Here, of course, is the crux of the matter. What is the taxonomist to look for? Subgenes? But would not a subgene-pool theory prove to be as inadequate as a gene-pool theory, and for the same reason, mainly because advocates of such views fail to take seriously the need for identity? ³³

Conclusion. With respect to the general solution, it is safe to say that it cannot be held with much more than a dubious probability. It is what all theories are and should be, a tentative effort to unify into an explanatory schema what data is presently available. To defend it as final would be most unscientific.

With respect to the special solution, the reader should now be alerted to at least two things. First of all, whenever anyone claims to have classified any two or more items under some one heading the immediate response should be: "Could you please tell me in what way the items classified are identical?" **If** the answer given has recourse to material entities occupying space, having weight, undergoing physical displacements, chemical changes, etc., we should immediately realize that the person's thinking on the subject is very likely faulty in at least one of the following ways: either he does not fully appreciate the problem of universals and the conditions for its solution, or, he does not fully realize the impossibility of basing identity upon material entities.

And second, the hope of the advocates of the special solution of finding an answer to the problem of speciation which avoids what they regard as the evils of the standard classical solutions, that is, their dream of locating among the beings they study concrete universals, remains unfulfilled. Hence, since the spe-

³³ Also, such a view would seem to multiply entities unnecessarily in that it would require identity factors for millions of genes, whereas, according to either of the realistic views, only one idea would be required for man.

cial solution is inadequate, the question as to the objective or subjective nature of the identity factor involved in the special solution does not arise. Today, the scientific world still awaits a solution to the social consequences of Darwin's nominalism.³⁴

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"Some thinkers, such as A. R. Wallace and M. J. Adler, have proposed reducing the number of true species (i.e., special creations) to a maximum of four (mineral, plant, animal, man) and regarding all other "species" as races or varieties. This approach, however, fails to explain how one concept can apply equally well to all the members of the race. Perhaps the answer resides with a rereading of some texts, e. g., *I Cont. Gent.*, cc. 51-54, 65. According to Aquinas, God's *esse*, as imitable in an infinity of ways, can be the prototype of all currently existing forms whether essential or accidental.

Before closing, an ethical sidelight might be of interest. Assuming that it is a crime to kill a human being, and that humanness is decided by genes, no modern (gene-pool) theorist should ever favor abortion. Since the complete genetic code becomes present at conception all abortions would be crimes. Ethicians, however, should be warned against using the gene-pool theory as an argument against abortion since their argument would be ill-founded.

THE ACT OF FAITH IN AUGUSTINE AND AQUINAS

THE FORMULATION OF the act of faith is today in the process of change, and this is to be applauded. The critique made of the traditional formulation is that the original message and *datum* of faith has been handed down to us within a cultural and philosophical framework and embodiment which is no longer comprehensible and therefore no longer credible to and for the men of our day.

This critique is partly correct and partly dangerous if it is not carefully understood. The task of relating faith to the needs and agonies of the men of each and every generation is one of the most serious obligations of Christians themselves but, above all, of their pastors. It is a continuous and on-going dialogue between the apostolic generation and the present generation, and it is this solicitude and dialogue which characterize the "Catholic and apostolic faith." The very nominations of "Catholic" and "apostolic" give us the two traditional poles of the dialogue in an effort to be faithful to the past as well as to the present. It is this principle of dialogue which has characterized the very life of the Church during its two-thousand year tradition and, in fact, represents a perfect definition of the word "tradition." The preaching of the Church must be in continuous and living dialogue with the present generation by faithfully translating the ever-ancient, ever-new apostolic witness and message through the many and various languages of men in time and space. This double tension and polarity of the Catholic faith, therefore, represent its original past as well as its dynamic present, command and measure its activity which was inaugurated at Pentecost and continues unabated and faithful to the present day. The Catholic faith would be fallacious and vacuous without this fidelity and continuity in and to the present from

the past. This tradition has also emphasized the very important and crucial role which the apostolic powers invested above all in the successor of Peter in the See of Rome have played in this faithful elaboration, transmission, and interpretation of the Catholic and apostolic faith. **It** has always emphasized that this prerogative is not of human origin but of divine right.

This dynamism of the faith is related to the world of men in a twofold way: the first is in the area of *action* where men in fact actually live and breathe; the other is in the area of *thought* where wisdom governs the actions of men in a total and, as it were, a finalized way. The reality of today is that never has faith and the Church been needed so badly as now, even if the modern world admits this only in spite of the inability of many within the Church to relate their faith efficaciously to the needs and problems of modern man. We have behind us in the past one hundred years two great councils as well as a great wealth of theological, spiritual, liturgical, and moral research, development and investigation; this, above all, in the light of the fact that the previous theology has been and continues to be impotent to perform the task of efficacy, that is, of relating the Catholic faith to the needs and understanding of the modern world. In order to have arrived at the point where we now are in our development, it is, and continues to be, evident that the bark of Peter has had some rough seas to traverse as any history of the Church of the past one hundred years will patently reveal: modernism, church and state, evolution and psychiatry, social teaching and birth control, clerical discipline and collegiality-and many more. Thus, the transmission of the Catholic faith as efficacy for today's world has been and continues to be a troubled and turbulent one.

If this is indeed the case today, then it becomes all the more important to examine the notion of faith in its historical developmental sense, so as to see clearly what the task of the modern theologian must be in separating the notion of divine faith from its developmental *cadres*. **It** is only in this way that

he can safely confront the modern experience and relate divine faith to this new experience. We think that we can do no better than to investigate this tradition as it has come down to us principally in the two great proponents of the Catholic tradition, St. Augustine of the fifth century and St. Thomas Aquinas of the thirteenth century. ¹ In this way, the theologian can rethink the present with the examples of tradition before his eyes. We shall also give a small expose of Scripture to further set our bearings for the present task of theology today.

¹ The bibliography in this area is enormous. We shall confine ourselves to the most salient works for this limited study. R. Aubert, *Le Probleme de l'Acte de Foi* (Louvain, 1960); W. Betzendorfer, *Glauben U. Wissen bei des grossen Denkern des Mittelalters* (Gotha, 1931); F. Bourassa, "Adoptive sonship: Our Union with the Divine Persons," *Theological Studies*, 17 (1952), pp. 309-355; L. Boyer, *[Incarnation et l'Eglise-Corps du Christ dans la Theologie de S. Athanase]* (Paris, 1943); V. Capanata, "La deificacion en Ia soteriologia Augustiniana, *Augustinus Magister*, II (Paris, 1954), pp. 745-754; E. M. Carney, *The Doctrine of Saint Augustine on Sanctity* (Washington, D. C., 1945); L. Cerfaux, *Christ in the Theology of St. Paul* (New York, 1964); *La Communaute Apostolique* (Paris, 1943); M. D. Chenu; "La psychologie de Ia foi dons Ia Theologie du XXIII• siecle," *Etudes d'histoire litteraire et doctrinale du XIII• siecle*, pp. 163-191 (Paris-Ottawa, 1932); L. Ciappi, "The Presence, Mission and Indwelling of the Divine Persons in the Just," *The Thomist*, 17 (1954), pp. 131-144; J. Cottiaux, "La Conception de Ia Theologie Chez Abelard," *RHE*, 32 (1932)), pp. 290-299; J. De Guibert, "A propos des textes de S. Thomas sur Ia foi qui descerne," *RSR*, 9 (1919), pp. 30-34; J. De Wolf, *La justification de la foi chez S. Thomas d'Aquin et le P. Rousselot*, (Bruxelles-Paris, 1946); J. Dupont, *Gnosis: La Connaissance religieuse dans les epitres de S. Paul* (Louvain, 1949); J. Engert, "Psychologic u. Erkenntnistheorie des Glaubensaktes bei Th. V. Aquin," *Studien zur theologischen Erkenntnislehre* (Regensburg, 1926), pp. 65-127; "Foi," in *Dictionaire de la Theologie Catholique*, t. 2, C-2230-2240; E. Gilson, *Introduction to the Study of Saint Augustine* (New York, 1961); H. Lang, *Die lehre des hl. Thomas v. Aquin von der Gewissheit des iibernaturlichen Glaubens* (Augsbourg, 1929); "Pistis," *Theological Dictionary of the New Testament* (Grand Rapids, Michigan, 1968), pp. 174-228; F. Prat, *The Theology of St. Paul* (London, 1954), 2 vols; W. H. Paine Hatch, *The Idea of Faith in Christian Literature from the Death of Saint Paul to the close of the Second Century*, (Strasbourg, 1925); J. Quasten, *Patrology* (Westminster, Maryland, 1950-1958), 3 vols.; P. Riga, "The effect of God's love on man according to Saint Augustine," *The Thomist*, 32 (1968), pp. 366-386; A. Stolz, *Glaubensgnade V. Glaubenslicht nach Thomas V. Aquin* (Rome, 1933); A. Turrado, "La inhabitacion de Ia S. Trinidad en los Justos segun Ia doctrina de San Augustin," *Augustinus Magister*, I (Paris, 1954), pp. 583-593; E. Walter, *Glaube, Hoffnung und liebe im Neuen Testament* (Fribourg, 1940).

Holy Scripture

It is a truism to say that the link between the natural and the super-natural is the act of faith which is, at once, both a human and a divine action. **It** is at this precise point that these two realities meet and are joined in the divinization of the person professing faith by the act of God's self-communication to man. **It** is not our objective here to go into any detail as to the thematization of this faith in modern context since this is beyond the scope of the present article.² The act of faith is both the act of rational man as well as the fruit of God's self-communication to man ("grace") which, as tradition has called it, is the beginning of eternal life in us (*inchoatio vitae aeternae in nobis*). The history of the theology of faith (and of grace) is filled with attempts to reconcile these aspects into one harmonious whole (the human [natural] and the divine [supernatural]). Faith as an act is essentially supernatural, because it requires absolutely and unconditionally the free self-revelation and communication of God (which can be, as tradition has called it, the fruit of grace); yet it also depends on man's free will, because it is only an act which is properly human, and therefore free, which can give this act its moral and meritorious character on the part of man. This act on man's part must also be reasonable, for the intelligence will acquiesce in the evidence only where there is reasonable certitude. **It** is true that some theologians during the rationalistic period attempted to go too far in showing that faith was reasonable by making it almost seem as if faith were the result of a syllogism, while still others tended simply to emphasize its divine character (the *credo quia absurdum* of Tertullian). But both extremes (rationalism and fideism) are at opposite poles of the true Catholic teaching of faith.³ Thus any investigation worthy of note must begin with

• Some very fine work in this area has already been done by Karl Rahner, *Heaven's of the Word* (New York, 1969) and *Spirit in the World* (New York, 1968).

⁸ For the teaching of the Councils, see the sixteenth Council of Carthage in

the revealed data in order to see its implications and then go on to the elements *of* tradition in order to see how this tradition has interpreted and applied this data in history.

The word *Pistis* (faith) in the Bible is a complex term, and its meaning is much broader than the notion *of* faith, at least as it is commonly accepted today.⁴ The Synoptic gospels call this grace the descent *of* the messianic kingdom from heaven to earth in the person *of* Jesus, and it is to this reality that all men are called.⁵ Men *of* goodwill will respond to this invitation *of* God.⁶ *Pistis* is, then, also the response *of* man to this gratuitous offer *of* divine gifts. This act *of* faith and response is conceived as a vital and living act *of* a man who unites his entire person to this kingdom and promise *of* God. The man *of* faith binds himself completely to Christ as his vital insertion into the divine work to which in Christ he submits himself with his whole heart and being. Faith is an absolute confidence in the efficacy *of* the redemption wrought in and by Christ from on high.

The notion *of pistis* in the Bible has a complex character. There is an intellectual element, a trust and confidence, a hope in the realization *of* the promises *of* God and, finally, a new life and a new man which the man *of* faith receives and becomes in faith. That is why the Bible often speaks *of* faith as the justification *of* man.⁷ It would be worth our effort to examine each *of* these elements more in detail.

First *of* all, there is the intellectual character *of* faith. In order to give oneself over to Jesus completely there must be some understanding *of* his person and his message. Further

418 (D. S. 225-230), the *Indiculus Coelestini* of 435-42 (D. S. 238-248) the Second Council of Orange (Jf 529 (D. S. 373-376, 385, 396-397), the Council of Trent, 1545-1563 (D. S. 1520-1583).

• See the article, "Pistis" in *The Theological Dictionary of the N(}W Testament* (Grand Rapids, Michigan, 1968), pp. 174-185.

• Mt. 9:6; cf. P. Antoine, "Foi," *Supplement au Dictionnaire de la Bible*, II (1938), c. 278.

⁷Lk. 2:14.

⁷ Cf. F. Prat, *The Theology of St. Paul*, II, pp. 253-280.

development of this is known as the *Symbola fidei*, that is, the clarification in history of the original datum given to us in Christ in the original sources of revelation. This character is made clear in the gospel of St. John where the evangelist speaks of the veracity of God revealed to us in Christ and in the truths which Christ has given to us from God.⁸ This faith implies a total confidence and giving of oneself over to Christ because he is true and worthy of this confidence and surrender. The doctrinal aspects of salvation appear clearly in the teaching of St. Paul's major epistles. The Apostle was at great pains to continuously inculcate and penetrate the great *Mysterion* of God revealed to us in Christ Jesus.⁹ Throughout these passages it is always a question of intelligent faith in the mystery of God who is Christ.

Prolegomena

Christian faith always presupposes a general faith such as the very general religious experiences of the universe, as well as the mystery of men. This can be called faith in the broadest sense of the word, even though it is an implicit faith in the action of a personal God in the world and his providence for the world. This form of faith was found throughout the ancient world¹⁰ and can be found in the modern world as well.¹¹ Christian faith as an explicit enunciation presupposes, at least in some general sense, a desire for redemption, that is, a desire for ultimate hope and meaning of human existence. We see this in the *Acts* where Paul became angry at the indifference of many of the Greek philosophers of Athens over precisely this question. They were interested in the trivia and hairsplitting, not in the concrete and ultimate meaning of human existence.¹² It was the same with Christ who became angry only

⁸ Cf. L. Cerfaux, *Christ in the Theology of St. Paul*, pp. 86-90.

• Cf. Rom. 10:16-19; I Cor 2:1-II; Gal. 4:9, 10; Col. 2:2-3; Eph. 3:8-9; 4:13.

¹⁰ E. Walter, *op. cit.*, pp. 10-15.

¹¹ K. Rahner, *Do You Believe in God?* (Westminster, Md., 1969), pp. 8-20.

¹² Acts 17:17.

at the Pharisees who were always busy about the minutiae of the law but neglected love, justice, and compassion—the foundation of the mystery of man and of God.¹³

Thus, as a general description, the specific notion of Christian faith appears essentially as a personal acceptance of a divine attestation, announcing to men that the possibility of salvation has now been given to them. It is to this end that men, implicitly or explicitly, have always aspired in all of their human dreams and longing. Yet this message of salvation is not (nor could it be) accepted by man because of its iron-clad internal logic but for the unique reason that God's authority has attested to its truth. The preparation and the acceptance of faith has been prepared for in the heart of man, but the actual gift of that can only be by the supernatural gift of God Himself. In this way, it is clear that faith cannot be explained in any pelagian, semi-pelagian, gnostic-or any other philosophical way, for that matter. As a message of salvation freely given by God to men it is an historical act. It comes to men by the mediation of the preaching of Christ and continues today, by his authority, in the preaching of the Apostles and their legitimate successors. "Faith comes from hearing." Christ is the faithful witness to what he has seen in heaven and has related this to men.¹⁴ It is to this word of God in Christ that the Apostles bear witness (*martyres*), namely, to God's Word revealed and confirmed in the life, death, and resurrection of Jesus.¹⁵ Therefore this testimony and word of the Apostles is not simply the word of man but also, by the power and efficacy of God, the word of God to men. Yet only those who are well disposed do in fact receive this message of salvation. Christ often speaks of this moral preparation in the Scriptures.¹⁶

The acceptance of God's word has a definite moral character,

¹³ Mt. 23:1-6.

¹⁴ Jn. 1:16.

¹⁵ L. Cerfaux, *La Commune Apostolique*, pp. 24-8.

¹⁶ See in particular Jn. 3:19-21.

since man in fact freely submits to this word as God's message. Man then has the grave responsibility of accepting or rejecting this message in his own life. It is not our objective here to thematize the ways or means God uses to communicate this choice to every man, but it is a teaching of the Catholic faith that God offers this choice to each and every man who lived or ever will live on the face of the earth. Depending on how each man is interiorly disposed to God's grace, he will either accept it unto salvation or become ever more blind tending toward rejection of this gift of salvation. This theme of "belief-blindness" is particularly well-developed in the gospel of St. John where Christ preached to the unbelieving Jews (prototypes of all unbelievers), which is further a theme of the prophets of the Old Testament. St. Paul also brings out the blindness of the pagans to the announced message; they were not well-disposed to the Word because their lives were corrupt and evil. A good moral life is the excellent preparation and necessary pre-disposition for receiving God's word in the act of faith.¹⁷

Another element of the *prolegomena* of the act of faith given to us in Scripture is the testimony which God gives to us himself in the word addressed to man. First of all, God confirms this apostolic message by means of signs and wonders. The idea of a guarantee conferred on the testimony of a prophet was a fundamental idea of the Old Testament.¹⁸ St. Peter recalls this to his listeners in his first discourse at Pentecost⁹ Christ appeared as a man approved by God through his miracles and prodigies, the principal one being his own death and resurrection which put the divine seal of approval on the work and word of Jesus.

"This Jesus God raised up, and of that we are all witnesses."²⁰ The miracles of Jesus were prodigious events both

¹⁷ See Romans, cc. 1-2, concerning this moral blindness.

¹⁸ See our study of "semeia" or signs in P. Riga, "Signs of Glory," *Interpretation* 17 (1963), pp. 402-424.

¹⁰ Acts

•• Acts

as sign of the establishment of the kingdom on earth among men as well as apologetic motive for belief. In other words, these miracles authenticate Jesus as the one sent from God to bring the good news of salvation to men.²¹ They are the revealing signs of the presence and personal action of God, authenticating the mission of the Son of God. Christ was under no illusion as to the power of these signs to convince those who were badly disposed to receive this word. Indeed, in the gospel of St. John Jesus considers imperfect any faith which is born simply from a contemplation of the signs themselves.²² Miracles are an invitation by God to go beyond their pure materiality to their spiritual meaning and content. The great proof of the apostolic message will be the great sanctity of life of the Apostles themselves as the great apologetical motive. It is St. Paul who recalls these events of the Spirit for the benefit of those who are tempted to doubt/³ but even more important than this is the example of his own life, conviction, ardor, and power of persuasion.²⁴ What convinces the faithful is not the human word of preaching as such but the action of the Spirit acting in the faithful who hear this word of God preached.

Added to this visible action and confirmation of and by the Spirit there is also his secret and invisible action in the hearts and souls of the listeners of the Word of God. This interior appeal of grace to faith guides and directs the soul to recognize the messengers of God's Word as well as the divine character of that word announced. Thus, in order to receive this word efficaciously as salvation, one must be disposed as a little child/⁵ for only in this humble and obedient way can one be reborn of water and of the Holy Spirit. The Word of God

²¹ Jn. 2:11; 11:47-53; 12:32, 37; 18:32; 20:30 and compare these texts with Ex. 10:1-8; 11:9; Deut. 4:34; 7:19; Num. 14:11; 29:1; 5:22.

²² Jn. 2:18; 4:48, 53; 5:36; 6:32; 43; 8:21; 9:1-9, etc.

•• Hebrews 2:4.

•• I Thess. 1:5.

²⁵ Mt. 11:25-26; Lk. 10:21.

•• Jn. 3:15.

announced can be efficacious for salvation only if informed by the Holy Spirit. Jesus himself spoke in the light and force of the Spirit, and it is the Spirit who gives the power of salvation to this Word of Jesus. Thus, the Christian is created by the announced evangelical word and the Spirit. Both the word and the Spirit are an inseparable entity precisely because the Spirit is always the Spirit of Jesus.²⁷ That is why the carnal man, that is, the man who does not possess this Spirit of Jesus, cannot perceive or understand the things of God. These truths are madness and stupidity for such a man/⁸ and for this reason, no one can confess that Jesus is Lord and Savior except in the Holy Spirit.²⁹ Moreover, it is the Spirit himself who illuminates and informs the heart and mind of the believer, and it is he who gives him the knowledge (*gnosis*)³⁰ of the mystery of God.³¹

Scripturally speaking, then, faith is always in relationship to the Spirit who inhabits the spirit and heart of the believer in a sort of dialectic. The gospel of St. John sees in the grace of faith an illumination, a knowledge which alone can introduce us into the secret (*mysterion*) of the divine mysteries. St. Paul also knows that faith in a sense is a real beginning even here on earth of the goods of the kingdom ("first fruits of the Spirit").³² This knowledge of the heart for St. Paul consists above all in rendering account to the Christian of the incomprehensibility of the mystery of God which surpasses all forms of knowledge here below.³³ Paul insists on the imperfect knowledge of this mystery here below "as in a glass darkly,"³⁴ as well as the mortifying aspects of the knowledge which comes from faith which is veiled, enigmatic, and in-

²⁷ Rom. 8:9.

•• I Cor.

•• *Ibid.*, 3.

³ Cf. J. Dupont, Gnom: *La Connaissance religieuse dans les epîtres de S. Paul*, pp.

⁸¹ Eph. 1:17.

³² I Cor. Rom. 5:11, Col. 1:18; II Cor.

⁸³ Col.

³⁴ I Cor. 13:

direct. Faith thus plunges the mind directly into the terrible and invisible abyss of God's mystery and, as such, is an incomprehensible scandal to the carnal man, that is, to the man who is proudly self-sufficient and unheeding to the Word and the witness of the Apostles in whom and by whom God speaks to men. For Paul, this knowledge of faith of the believer is the knowledge of a pilgrim³⁵ which will always remain essentially imperfect as long as man travels this life on earth.³⁶

St. John, on the one hand, has the tendency to place faith and a certain vision together and to emphasize that in faith we have a view already of the world to come and consequently a real foretaste of eternal life even now. Thus faith for St. John is an immanent principle of the soul,³⁷ permitting it to experience at least in some real but imperfect way the gifts which God has given to man.³⁸ We can safely say, then, that the notion of faith in the gospel of St. John is at the origin of that Oriental tradition in Christianity which chose to underline the illuminating character and mystery of faith. St. Paul, on the other hand, tends to oppose faith and vision which in its own turn will be emphasized by the Western tradition. **It** is superfluous to add that these two approaches to the mystery of faith are not contradictory but rather mutually complementary.

Let us conclude this brief scriptural-prologomenal section of our study by saying that, in sum, Christ (and the Apostles) does not preach a series of truths or doctrines (although these can be found scattered among the New Testament writings) but rather the very person of Jesus "who is the way the truth and the life."³⁹ To be a Christian, then, is to have faith and total commitment in the person of Jesus as saviour of the whole world.⁴⁰ **It** is in this act of faith that the Christian

³⁶ Heb. 11:13; 13:14.

•• Cf. J. Dupont, *op. cit.*, pp. 42-50.

³⁷ Cf. Jn. 1:14, 18, 51; 2:11; 3:5, 36; 4:53, 5:24, 25; 6:35, 40, 47-50; etc., throughout the whole of the gospel.

³⁸ Walter, *op. cit.*, pp. 39-44.

•• Jn. 14:6.

•• Jn. 4:U.

becomes a sharer in the very mystery of Christ wherein one's whole life and being is animated by this trust, confidence, and love in Jesus which is, in sum, what the act of faith is for the Scriptures. In him and by him we become what the Fathers of the Church termed "Sons in the Son of God." This view of faith is a far view from any mere adherence to a doctrine, a system, a moral code or any set of truths or beliefs. Christianity is essentially a belief in and a relationship to a person, the person of Jesus Christ. As we have seen, this faith is not a "blind faith," for it engages man in the totality of his being. Man has reasons for such a total engagement as evidenced in the miracles and prodigies given to us in Scripture, above all of the great sign of the resurrection of Jesus; but the faith is not and cannot be the product of a rational conclusion, precisely because it is the mystery of God's self-revelation and self-communication of himself in Christ to men. Such a mystery is infinitely beyond the rational powers of man. That is why tradition has rightly called the gift of faith a "supernatural gift" given only by God himself in the communication of the Spirit of Jesus. Only in this self-communication ("grace") can man begin to comprehend the mystery of God.

The Fathers of the Church

It will also be worth our while in this short study to investigate, however briefly, the act of faith as developed in the early Fathers of the Church! The reality of the matter is that not too much scholarly work has been done in this particular area so that our knowledge of the act of faith from the death of the Apostles up to St. Augustine is skimpy. One of the reasons for this is that the early Fathers of the Church never made any attempts to write an orderly treatise of the act of faith but were rather interested in a pastoral and prac-

"For this section we owe much of our material to W. H. Paine Hatch, *The idea of faith in Christian literature from the death of St. Paul to the close of the second century*, (Strasbourg, 1925).

tical approach. Therefore what knowledge we do in fact have comes from a general analysis of their works.

Another object of these early Church Fathers was to attempt an integration of the intellectual and philosophical elements of the Greek philosophy of the day (at least certain aspects of this philosophy) into the complex which is the act of faith. Their endeavor was to present the Christian faith within certain intellectual philosophical *cadres* understandable by the people of their day. It was just this which Clement of Alexandria attempted in his *Stromateis* or "Miscellaneous Studies." For him, the only true *gnosis* (knowledge) was that which presupposed the faith of the Church, apostolic in its foundation and possessing Divine Revelation. While always loyal to this, Clement explained and supplemented it with the ideas of Greek philosophy, which he also regarded as a divine gift to mankind. His motive was apologetic in nature. St. Cyril of Alexandria attempted the same thing in his *Katechesis* wherein he applied philosophical reasoning and *cadres* to the text of the Creed itself. The thought of these early Fathers with regard to the act of faith must not be sought in any *ex professo* exposition but rather in their occasional sermons, writings, and discourses of an apologetical nature.⁴³ In our present study we can only give some salient points.

The exposition of faith of the early Fathers of the Church is a dogmatic one in the profound sense of that word, that is, where an exact knowledge of supernatural realities plays an essential role. We have only to read a few of their anti-gnostic writings to see this clearly as well as some of the passionate debates which these same Fathers had with their non-believing contemporaries. This culminated in the dogmatic statements of the early councils of the Church (Nicaea, Constantinople I, Ephesus, Chalcedon) where the philosophical categories (if not their original signification) were used in the

•• *Ibid.*, pp. 10-86.

•• For a more detailed view of each of the Fathers, see J. Quasten, *Patrology* (Westminster, Md., 8 vols.

explication of the faith (*prosopon, ousia, hypostasis, sunergeia*). On the one hand was the absolute necessity of remaining faithful to the original *datum* of divine faith and, on the other, a solicitude to explain this faith to the men and women of their time against heresy. This effort was motivated by the conviction that the knowledge of God is one and was absolutely necessary for the divinization of man.⁴⁴ The intellectual character of the faith was accepted by these Fathers as something beyond doubt, but their conceptualization of this faith was much more than a simple intellectual adherence to a doctrine or to a set of doctrines. Faith was, for them, the reception into the believer himself of God himself who communicates himself to man who is thus "divinized."⁴⁵ We see this in the frequent interchange and even equivalency of the words *fides* and *fidelis* as referring to the Christian life in its totality.⁴⁶ Faith is here presented not simply as an objective acquisition of knowledge but rather as a real participation of the soul in the divino-human life of the Incarnate Word. The consequence of this is an "illumination" of the soul and the intelligence which permits the Christian to contemplate in an obscure but real way the divine reality, the fullness of which will be his only after death in the beatific vision. This was the common interpretation of the Fathers of Hebrews: "Now faith is the assurance of things hoped for, the conviction of things not seen."⁴⁷ They explain that it is in virtue of faith that we await from God the fullness of divine goods as yet unseen by mortal man: the resurrection, glory, immortality. Yet, these goods are truly ours even now in an imperfect but real way, efficacious for our moral conduct, in the very act of faith. Thus

u L. Boyer, *l'Incarnation et l'Eglise* . . . , pp. 37-39.

.. For a further development of this theme, see J. Gross, *La divinization de l'homme d'apres les Peres Grecs* (Paris, 1948), pp. 50-68; W. J. Burghardt, *The Image of God in man according to Cyril of Alexandria* (Washington, D.C., 1957) pp. 58-106.

•• Cf. Cyril of Alexandria, *Catech.*, 10 (P G 6, SS, col. 517) and Salvianus, *De Gubernatione Dei*, L, III, C. 2 (P L 53, col. 58).

•• Heb. 11:1. *estin de pistis dpizomenon upostasis*.

faith is conceived as a union (even in the now, however obscurely) with the divine goods, that is, with God Himself. It is an existence in us of what we hope for fully in the future or, in the words of Clement of Alexandria, "a contemplation of grace."⁴⁸ It gives man in part the power of divine vision which he lost in the sin of Adam. Thus faith is seen by the early Fathers as a type of illumination of the soul or even of a "spiritual eye."⁴⁹ The great temptation of some of the Greek Fathers was gnostic in origin, that is, to leave the humble knowledge of faith from the authority of God in order to go into a "learned" knowledge of faith by means of philosophical categories and systems. In this there was danger of heresy as evidenced in the case of Nestorius, Origen, and even of Clement of Alexandria himself.

In any case, these early Fathers insisted that this religious knowledge by faith must develop into a true *gnosis*, that is, into a deeper, more mature faith of personal commitment. The foundation of this faith, however, must always remain firmly embedded in the adherence to the word of God; it must be accepted by the believers only because of the authority of God who reveals himself in and by this word. The Fathers also emphasized the good and bad disposition of the soul in the reception of this word. It is an impossible work—even for God himself—to instruct or convince one to believe who did not wish to believe. All these Fathers were unanimous in saying that no divine truth can dawn on him who does not control and train his passions. Christianity, says Clement of Alexandria, is a light which enters the soul by way of obedience to God.⁵⁰ This good moral disposition represents man's part in the act of faith, but the part of God is even of greater importance. Many of these Fathers made reference to the direct work of the Spirit of God in the act of faith, who indeed inhabits the heart of man and thus makes faith possible for

•• *Strom.*, II, 4.

•• Cf. Clement of Rome, *Epistle to Corinth*, LIX, S.

⁵⁰ *Strom.*, I, III, c. 5.

mortal man. Without the Spirit of God who inhabits the soul of man, man is spiritually blind, deaf and even dead. "No one can understand unless God and his Christ give him understanding."⁵¹ All subsequent tradition will follow Justin in this respect by saying that, if some are converted and others are not, it is because the former are docile and open to the teaching of God (by a good moral life) while others resist this grace due to the bad disposition of their souls brought about by a bad moral life. During the Semi-Pelagian controversy much will be made of the fact that the Church prays for sinners and the conversion of those who do not believe as a proof of the necessity of divine aid both in the act of faith as well as in the act of repentance.⁵² Not only this, but the mere will to want to believe is itself the fruit of God's grace.⁵³ The force of this divine action is so great, according to Origen, that it draws souls to the faith almost in spite of themselves.⁵⁴ This action of grace is further described as the action of a lover upon the beloved.⁵⁵

Yet, for all of this, the Fathers of the Church insist on the rational and reasonable aspects of the act of faith. Tertullian himself who used to flaunt *Credo quia absurdum est* to the pagans does not hesitate to establish the adherence to the Christian faith as an act which is eminently reasonable.⁵⁶ Yet, these Fathers do emphasize that, in order to understand the value of the proofs for the Christian faith (which are real), the person must already be illuminated by God's grace. This was above all necessary for the case of prophecy which is a more powerful proof than that from miracles. This last em-

⁵¹ St. Justin, *Dial. with Tryphon*, VII. c. 109.

•• Cf. *Indiculus Coelestini*, D. S. 246.

⁵⁸ See the many treatises of St. Augustine on this subject: *De Gratia et Libera Arbitrio*, *De Correptione et Gratia*, *De Praedestinatione Sanctorum*, *De Dono Perserverantiae*, all of which can be found in *Oeuvres de Saint Augustin* 24 (Desclee de Brouwer, 1962).

⁵ *In Lk*, VII (P G 13, col. 1819)

⁵ St. Jerome, *In Math.*, L, I, c. 9; V, c. 9 (P L 26, col. 561).

⁵⁸ See his *Adversus Praxean*, c. 5 (*Tertuliani opera*, pars iii: ed. Aemilius Kroymann: Vienna and Leipzig, 1906).

phasis was made most probably in view of the Fathers' difficulties in explaining away some of the pagan phenomena which appeared as miracles. Consequently, any form of rationalistic "demonstration" of faith was an impossibility since it was above all a divine gift. These Fathers would not have rejected the possibility of a certain credibility of divine faith which would be purely natural, yet such a problem never arose for them nor did they formulate it as such. They did recognize that various pagan philosophers (particularly Plato who was called "clivus" by some of the Fathers) had discovered some important truths, even certain divine truths, but at the same time they emphasized that certain monstrous errors were made by these same philosophers. It showed clearly that without the grace of God human reason left to itself leads to serious aberrations and that thus reason alone can never be a true judge of the Christian faith.

Thus the "proofs" of the Fathers for the Christian faith had to be conceived in a different way than we would understand the meaning of "proof" today. There was a "certain indecision on the precise point which separates natural knowledge from supernatural faith."⁵⁷ This is clear since "to introduce any rational element into the actual assent of faith would be to destroy its absolute certainty, since full rational evidence of the fact of revelation is not (as a rule) to be gained from the signs of credibility."⁵⁸ Even when the Fathers invoke the notion of miracle as "proof," it is less to prove the divine origin of a doctrine than to show the omnipotence of God to reason itself. The faith which requires miracles is considered to be an inferior type of faith ("imperfect"), and it gives less honor to God. This does not imply that the Fathers professed a sort of fideism since they emphasized time and again that there is no opposition between reason and faith, only that faith is of a more eminent and divine

⁵⁷ *Dictionnaire de la Theologie Catholique*, t. II, c. 2240.

•• Art. "Faith," in *Sacramentum Mundi: An Encyclopedia of Theology*, II (New York, 1968), p. 825.

order for which it is necessary to receive divine grace to understand. This is only another way of saying that the believer never gives his assent to faith *after* any intrinsic demonstration of the faith itself. This would be to destroy the whole notion of faith. A man believes not because he has "seen" the rational and intrinsic demonstration of faith but simply because God has revealed this to him on his own sovereign authority.

With these preliminaries discussed, we are now ready to examine the views of St. Augustine with regard to the act of faith.

St. Augustine

The study of Augustine is important if for no other reason than that the church has officially adopted some of his teachings in her own Councils.⁵⁹ In general, we may say that Augustine's theology of the act of faith is dependent upon St. John and St. Paul as well as the Alexandrian school of thought.⁶⁰ We may add to this the psychology of belief seen in his own conversion to the faith as given to us in his *Confessions*.⁶¹ Since Augustine was a deep intellectual, it will be normal to find in his works a rational defense of the Christian faith against the many heretics of the fifth century.

As we have said with regard to the other Church Fathers, it is not possible to find any systematic treatment of the act of faith in Augustine; we must therefore be content with a simple gathering from his occasional writings and sermons. His observations on the motives of faith which will give the act of faith its credibility will be brought into focus in the present article; these include the moral and psychological conditions in man necessary for the reception of faith itself. On the other hand, against the Pelagians Augustine insisted on the

⁵⁹ Cf. Council of Orange in 529, D. S. 373-376, 385, 396-397.

⁶⁰ E. Gilson, *The Christian Philosophy of Saint Augustine* (New York, 1960), pp. 165-171.

⁶¹ *Oeuvres de Saint Augustin*, 13-14 (Desclee de Brouwer, 1962).

gratuity and freedom of the gift of faith to the Christian precisely because it is supernatural and thus in absolute need of divine illumination.

Like St. Paul, Augustine underlines the difference between simple faith (as an adherence to testimony) and the scientific knowledge which directly penetrates its object. It was Augustine who wrote *Intellectum valde ama*, yet he is very conscious of how imperfect the indirect manner of knowledge really is. Faith is given and received on divine authority and cannot in any way contradict human reason; on the contrary, the divine illumination in and by faith serves to purify and stimulate the life of the spirit, thus giving it a true understanding and knowledge of heavenly realities. That is why Augustine often repeats the words of *Isaiah*: "Unless you believe, you will not understand." This is not a form of fideism in Augustine, and it is important to understand exactly how he used this phrase from Scripture.

In this formula, the intelligence of which Augustine speaks designates a *religious* knowledge where, under the influence of divine charity, faith grows ever more deeply and profoundly into a theological elaboration and a mystical penetration of its object who is God himself.⁶² The Beatific Vision is the object of faith; here below we can only hope to grow and penetrate this object of our faith which can really know no terminal point. In order to attain this height of mystical penetration, we must always begin by believing the essential truths given to us by divine authority. It is for this reason that all forms of rationalism are explicitly rejected by St. Augustine for the real "demonstration" of faith can only be done by that human reason which has first been illuminated by the divine light of faith itself. It is only in this way that a man can penetrate the depth of the divine mystery first revealed to us in Christ. This adherence is not a blind faith but one that has been motivated by reasons. In this sense we believe in

•• *De Utilitate Credendi*, I, 5; X, 118; XI, 115.

order to understand as well as understand in order to believe. There is a constant dialectic between the two.⁶³ This activity of reason which must precede the faith consists not only in grasping the sense of what we must believe (for we do not adhere to words but to ideas) but also to believe is in a sense to think with an assent.⁶⁴ Augustine also notes the reasonable and prudent character of our adherence to the faith by a careful examination of the title of the authority to which we adhere: "No one believes anything without first thinking that it must be believed."⁶⁵ Augustine's main argument for this reasonableness of faith is the fact that everyone accepts the authority of the Holy Scripture; only later does Augustine appeal to the miracles, prodigies, and extraordinary events of the Holy Spirit as motives for the faith.⁶⁶

Secondly, Augustine, by insisting on the obscure and imperfect character of faith (which in its function professes things which it cannot as yet see), leaves aside various elements which we have seen emphasized in the gospel of St. John. Yet, in his development of the moral and supernatural character of faith, Augustine remarkably has the same doctrine as the fourth gospel.⁶⁷ Augustine's own conversion had shown him the correlation between the bad will (and its consequent moral disposition), the act of faith, and spiritual blindness. Thus we find a rather contradictory attitude in him concerning the act of faith: he is a firm believer in the reasonableness of the act of faith and yet, at the same time, its betrayal by the bad disposition of the heart. He insists on a moral preparation for the act of faith as well as a humility of heart and this accounts for Augustine's continuous attempts to transform the intimate disposition of his listeners.

•• "Ergo intellige ut credas, crede ut intelligas," *EpiSt.* 120, 18 (P L 88, col. 458).

•• "Credere est cum assensione cogitare," *ibid.*

⁶⁵ *De Praed. Sanct.*, II, 5 (P L 44, col. 968).

•• Cf. *Serm.* 88, 1 (P L 88, col. 540).

•• See his *Tractatus in Joannem*, nos. 2, 28, 26, 27, 29, 84, 86, 88, 40, 47, 48, 49, 58, 69, 79, 95, 106, 110, 115.

It is love which asks; it is love which seeks; it is love which knocks; it is love which makes us adhere to revelation, and it is also love which maintains fidelity once faith has been given.⁶⁸

It is this love to which we must attribute the meritorious aspect of faith as well as—from a negative point of view—the responsibility for unbelief. Augustine always attributes the abandonment of faith to man alone, never to God, for God never abandons his own. **It** is man who always freely and willfully separates himself from God since God is never neglectful of his aid even to the worst sinner. **It** can be easily seen how great a part the free will of man plays in the act of faith.⁶⁹

As we have seen in the Scriptures and in the early Fathers, so too faith for Augustine is a much more complex reality than a simple speculative adherence to truth or to a set of truths:

Let us begin by making a distinction between our faith and that of the unclean spirits. To have faith is to believe; but James tells us that the devils themselves believe and tremble . . . **It** serves nothing to proclaim that Christ is the Son of God. Peter said it and heard this response: Blessed art thou, Simon; the devils said it and this was their response: Be silent.

. . . They said the same thing as Peter but the Master looks at the root and not the flower . . . **It** is fear which makes the demons speak but it is love which inspired the words of Peter. Thus he adds hope to faith; to hope itself is added charity.⁷⁰

The devils submit because they have no choice but to confess the *magnalia Dei*, the wonderful works of God. But meritorious faith and justifying faith alone is that which believes in God. **It** is for that reason that we can say that "we believe *in* God and *in* his Son, Jesus."

He who has faith in Christ, *credit in Christum*, who also loves Christ; for if one has faith without hope and without charity, one believes that Christ exists but one does not believe in Christ.⁷¹

•• *De Moribus Ecc.*, 50, 1, 17 (P L S11, col. 1S14).

•• *Epist. ad Vitalem*, 16 (P L S5, col. 985).

•• *Serm* 158, 6 (P L S8, col. 865).

⁷¹ *Serm* 144, 1t (P L S8, col. 788).

And again Augustine adds:

What does it mean to believe in Christ? By believing to love, by believing to go to him to be incorporated as his members.⁷²

This is the knowledge which comes from faith but a knowledge as well which implies a firm purpose of doing God's entire will for us. It is such faith alone which is salvific, for it is a faith which operates by charity. In this way Augustine identifies the faith of bad Christians with that of the devil; it is not worthy of the name of faith.⁷³ Modern theologians might well question this aspect of Augustine's teaching, but we must always remember that Augustine always had a pastoral view in mind and not properly a dogmatic one. It is for that reason that St. Augustine's teaching on faith must be seen in the context of a living faith.

One of the clearest aspects of Augustine's teaching on the faith-act is that faith informed by charity is even now in time the very beginning of eternal life. Above all, even if faith is reasonable and a good moral disposition necessary, it is above all the pure gift of God. This was the constant teaching of Augustine against Pelagius who exaggerated the part of man in the act of salvation by reducing grace to revelation and a preaching of doctrine. Faith for Pelagius was an affair of man's free will in corresponding to God's will and commandments. Augustine had no difficulty in showing that this was contrary to the Catholic faith. His arguments were mostly taken from the Holy Scriptures. According to these texts divine aid is indispensable for doing any good whatever and above all to believe in the above-mentioned sense. The sixteenth Council of Carthage (418) inculcated this same doctrine.⁷⁴ Still later, Augustine had to combat what subsequently became known as semi-pelagianism, which professed that grace is needed for any salutary act except that of the beginning of

••" Quod est ergo credere in eum? Credendo amare, credendo diligere, credendo in eum ire, eius membris incorporari," *In Joann.* 29, 6 (P L 85, col. 1681).

••*De Praed. Sanct.*, 8 (P L 44, col. 965).

"D. S. 221-280.

faith which is entirely in the hands and free will of man (*initium fidei*). Augustine saw very clearly that this was not logical, for why must we stop at the beginning of the act of faith? For St. Augustine, the initial aspect of faith is the result of the internal action of the Holy Spirit and not of man's free will. Referring to II Cor. 3:5, Augustine says that the decision to believe is already the work of God's grace in us.⁷⁵ In short, no salutary act whatever is possible without the grace of God which is the very foundation stone of Augustine's teaching on grace.

St. Thomas Aquinas

The scholastic influence on St. Thomas is evident in his treatise *De Fide* in the *Secunda Secundae* (qq. 1-14). He treats it as a theological virtue in its religious value and only later does he treat faith in its various psychological aspects. In this respect he is similar to Augustine in the treatment of both of these aspects, but Thomas inverts the order and importance: faith is above all a theological virtue and only consequently does he consider its psychological effect on man. Augustine, on the other hand, put great emphasis on the moral and psychological preparation for the act of faith in man. This distinction may seem trivial, but it does show the various ways and emphases which the notion of the act of faith has received in history and down to our own day. In this there is nothing new or extraordinary.

The very first question which Thomas asks is: what is faith? "Faith is a habit of the spirit which begins eternal life in us and which makes the intelligence adhere to those things which are not apparent."⁷⁶ Man is destined one day to enjoy the Beatific Vision and, since it infinitely surpasses all the natural powers of man, these same powers are radically incapable of attaining this objective and must therefore have a superior adaptation, a raising of the human faculties which is precisely

•• *De Praed. Sanct.* li, 5 (P L 44, col. 96li).

⁷⁸ - Fides est habitus mentis quo inchoatur vita aeterna in nobis, faciens intellectum assentire non apparentibus." *Summa Theologiae*, II-II, q. 4, a. 1, corp.

the work of the three theological virtues in man (faith, hope, charity) . Faith puts the mind and intelligence of man in possession of certain supernatural principles, making it conformed to the very knowledge of God and as such can be considered as the first beginning of eternal life (Beatific Vision) in man. Yet this participation in the divine light and intelligence remains in life as yet imperfect.⁷⁷ Faith does not put us into any direct contact with the Divinity but in an elevated human way (by faith and by grace) we attain the Divinity by judgments and affirmations which are more or less complex.⁷⁸ This is because, although God is supremely simple, our finite human minds can only imperfectly understand the Divinity, thus the complex of truths and doctrines in the act of faith. This reaches us by the human word of the apostolic message given and preached in the name of God which, as Scripture puts it, is "faith from hearing."⁷⁹ What is essential in this knowledge is the truth of the propositions to be believed, and these cannot be forced on the spirit of man like a metaphysical evidence. Man must first consider the authority of the one who is revealing. The result is that, if one or another of these truths from revelation could be established by human reason (v. g., the existence of God) , this truth could no longer be accepted on faith.⁸⁰ One believes for the simple reason that God has said so and for no other. This first truth who is God in the very object of knowledge which is superior to its own proper human object:

The formal object of faith is the First Truth according to which it is revealed in Sacred Scripture and in the doctrine of the Church which proceeds from the First Truth.⁸¹

⁷⁷ *De Veritate*, q. 14, a. ad 9; *III Sent.* d. 23, q. 1, a. 1 ad 4; *Summa Theol.*, II-II, q. 2, a. 8.

•• *III Sent.* d. 24, q. 1, a. 1; *De Verit.*, q. 14, a. 12; *Summa Theol.*, II-II, q. 1, a. 2.

•• *Summa Theol.* II-II, q. 6, a. 1.

⁸⁰ *III Sent.* d. 23, q. 3, a. 2; *De Verit.*, q. 18, a. 3; *Summa Theol.*, II-II, q. 6, a. 1.

⁸¹ - Formale objectum fidei est Veritas prima secundum quod manifestatur in Sacra Scriptura et doctrina ecclesiae quae procedit ex Veritate prima." *Summa Theol.*, II-II, q. 5, a. 8.

Thus the essential element of faith is the divine testimony for which the infallibility of God alone is the absolute guarantee for its truth. Thus faith is a type of indirect knowledge because it is by intermediary, but it remains superior to every other form of human knowledge.⁸² Yet, if it remains true that from the part of the object there is perfect knowledge (God),⁸³ still the human mode of understanding is very imperfect since the human intelligence is made to know its object directly. In the case of faith, its object (God or First Truth) is not immediately present or evident, since faith concerns those things which cannot be seen and are not apparent. The object of faith is mystery and will always be obscure to human reason.

The objection at this point would seem to be that we cannot have an absolute and firm assent to such a truth. However, says Thomas, we must remember that faith is a *theological* virtue and that thus God intervenes in the human faculties in order to elevate them and render them capable of a mode of knowledge which is superior to its own proper human object:

When a man adheres to faith, he is elevated above nature; there must be in him a supernatural principle which moves him from within; this principle is God. This faith ... comes from God who, by his grace, moves us interiorly.⁸⁴

It is in this way that "grace creates faith,"⁸⁵ a statement which is repeated many times in the writings of Aquinas by making continuous reference to Scripture and St. Augustine. In this way, he repeats the Augustinian theme that both Revelation and our assent to Revelation are both the pure grace of God.

The problem now was the same for Thomas as it was for Augustine: how can we explain that the divine action alone is responsible for the act of faith and yet that the act is a perfectly free act on the part of man. In the works of his

⁸² *III Sent.* d. 113, q. 11, a. 4.

⁸³ *III Contra Gentes*, 50, c. 40.

⁸⁴ *Summa Theol.*, II-11, q. 6, a. 1.

⁸⁵ "Gratia facit fidem," *ibid.*, q. 4, a. 4, ad 8.

maturity St. Thomas gives a position which is balanced and nuanced. He says, first of all, that there is a proximity between the first truths of faith and the first truths of the natural order. In both cases there is a certain correlation between external sensible evidence and an interior light (in the case of natural reason the intellectual agent, whereas in the case of the act of faith we have the grace of God).⁸⁶ St. Thomas puts this grace of God in relation to the will in the assent of faith which is properly intellectual. It is for this reason that Aquinas concludes:

The light of faith does not move by way of the intellect but rather by way of the will.⁸⁷

In order to understand this formula it is necessary to understand the important place of the will in the psychology of faith for St. Thomas. The whole Abelardian and Victorian schools of theology had already shown that faith proceeds much more from affective elements than from those of natural reason properly speaking.⁸⁸ Ironically, in spite of their philosophy, these schools came to the orthodox conclusion that the essential of faith consisted in love. As we have seen, for St. Thomas faith is the assent to the true on the authority of the one who reveals this truth, and thus faith is formally an act of the intelligence. Yet, Thomas does recognize the large part which the will plays in the act of faith. Love renders the act of faith meritorious and, as it were, informs and gives life to faith and the adherence itself is a work of love so that the act of faith is an act intrinsically determined by affective elements.

Faith has certitude from these elements outside of cognition, existing in the genus of affection.⁸⁹

•• *In Boeth de Trin.*, q. 8, a. 1, ad 4.

⁸⁷ "Lumen fidei . . . non movet per viam intellectus sed magis per viam voluntatis," *ibid.*, q. 8, a. 1, ad 4.

⁸⁸ Cf. J. Cottiaux, "La conception de la théologie chez Abelard," *RHE*, 82 (1982) pp. 290-299.

⁸⁹ "Fides habet certitudinem ab eo quod est extra genus cognitionis, in genere affectionis existens," *III Sent.* d. 28, q. 2, a. 2; q. 1, ad 1.

This certitude of the faith does not come from any objective evidence but rather from the pressure of the will to believe:

The intelligence can adhere to something without being, for all that, fully brought to its proper object but by adhering with one's will, by choice to one part rather than to another.⁹⁰

Faith is not a matter of psychological attitude. **It** is evident (as seen above) that faith is a form of indirect knowledge since it comes from the testimony of another (the First Truth, God); it is also clear that the necessary absence of any arguments which would give us absolute certitude will always give us some hesitation. But faith, explains St. Thomas, must be distinguished from this type of proof or probation. In faith the *cogitatio* coexists with an absolute or categorical adherence, since this adherence is not caused by the proper work of the intelligence but by the will.

For assent is not caused by knowledge but by the will.⁹¹

Thus the act of faith is an assent where the intelligence, like a captive, bends to the order of the will.⁹² But the will must have a motive for adhering and assenting which is none other than the authority of the Divine Word who reveals:

The will is inclined to adhere to invident revealed truths because they are proposed by God, much like a man believes in things which he has not seen because of the testimony of an honorable man who has seen them.⁹³

Man decides to believe because he sees, at least obscurely, that God desires and wishes him to believe. This is the necessary condition for arriving one day at the possession of God as he is in himself.⁹⁴ This decision of the will cannot

•• *Summa Theol.*, II-II, q. 1, a. 4.

⁹¹ *De Verit.*, q. 14, a. 1: "non enim assensus ex cogitatione causatur sed ex voluntate."

•• *Ad Hebr.*, c. 8, lect. 1.

•• *III Sent.* d. 23, q. 2, a. I, ad 2.

•• *De Verit.*, q. 14, a. 9, ad 9.

be explained principally by the fact that knowledge of the truth is good for the intelligence; rather, it is embedded in a more profound appetite and desire in man, that is, in the desire which each man has to appropriate to himself the divine promises. This is why the scriptural definition of faith in Hebrews 11:1 is put in relation to our hope. This is so because faith appears as the means of arriving at final beatitude which the will wants to possess and make its own. This desire of the will, as it were, creates pressure on the intellect to seek and to give its assent. What really motivates faith is the desire of our last end which is supernatural. This does not imply that the will is necessarily under the influence of charity, yet no being aspires to any end without having already experienced in some way the good of this last end at least inchoatively. This "taste" for the last end of man is infused in man by God.⁹⁵

Thus faith is always and fully under the influence of grace. This comes to man in the infused gift given to him at baptism, but it is also present in the divine impulses given throughout life.⁹⁶ Without these continuous impulses (*instinctus*) from God man would not decide to believe.⁹⁷ Thus the role of grace on the intellect in the movement of man toward faith is influenced by the divine attraction and as such is indispensable because it works on the heart of man and incites the will on to challenge the intelligence: to believe. This is meritorious for, although man is moved to believe, precisely because there is no absolute certitude to be seen by the intelligence the intellect adheres to the divine truths with merit.⁹⁸

What is the position of St. Thomas with regard to the credibility of faith? One wonders how this question can be fully answered since the question itself is a preoccupation of modern theologians and not of St. Thomas.⁹⁹ On the other

•• *Ibid.*, q. 14, a. 11.

•• *In Joan.*, c. 6, lect. 4, n. 7.

•• *Ad RYM.*, c. 8, lect. 6.

•• *Summa Theol.*, TI-TI, q. 2, ad 9, ad 8.

•• H. Lang, *op. cit.*, pp. 15-87.

hand, Aquinas did ask whether it is rational to believe or not. The external motives for faith and the arguments *ex convenientia* are well distinguished in St. Thomas. When he speaks of the *humanae rationes* which lead us on to faith he understands by this the signs from God such as miracles and prophecy as well as signs from the rational arguments coming from dogmas themselves.¹⁰⁰ This will have great influence on his apologetics and on his claims that they can influence the will of those who do not as yet believe.¹⁰¹ Miracles can be invoked in order to establish some form of quasi-empirical basis for belief, and the truth of a particular dogma is invoked in order to show that it is not rationally contradictory to hold that truth. The miracle acts as sign, as something which points to a power beyond that of natural powers both of nature and of reason.¹⁰² St. Thomas also appeals to miracles as a motive for faith and the acceptance of Christianity. His teaching on miracles is remarkable since it has a great similarity to that of Sacred Scripture.

A miracle is transcendent and of divine origin, which he proposes as an excellent guarantee of the divine authenticity of the doctrine which is taught in Revelation. It is a testimony rendered by God to the truth of a particular doctrine; it is also a testimony to the authenticity of the apostolic preaching of the Word who speaks in the name of God.¹⁰³ This element of Thomas's teaching of faith is of primary importance for him. Thanks to miracles, it becomes evident that the word of the prophet (and the preacher) is in reality the word of God expressed in the human word.

The faithful believe a man not because he is a man but insofar as God speaks in him which he can gather from certain actions.¹⁰⁴

¹⁰⁰ *III Sent.*, d. 14, q. 1, a. 1; q. 2, a. 3.

¹⁰¹ *Summa Theol.*, Joe. cit., a. 10.

¹⁰² *De Potentia*, q. 6, a. 9; *Summa Theol.*, III, q. 55, a. 3. See also B. Douroux, *La de la foi chez S. Thomas d'Aquin* (Paris, 1956), pp. 53-63.

¹⁰⁸ *Summa Theol.*, II-11, q. 178, a. 1.

^{10.} *III Sent.*, d. 23, q. 2, a. 2; q. 1, a. 3.

Some theologians have expressed the opinion that for St. Thomas only a miracle can vigorously constitute a proof for the divine authenticity of the doctrine, and yet this does not seem to be the case since we see so many who do not believe in spite of the many signs which have been worked. St. Thomas explicitly says that it is an inferior type of faith which needs miracles to corroborate its authenticity.¹⁰⁵ For a particular individual, moreover, a miracle is neither sufficient nor necessary that one truly believe:

He who believes has a sufficient motive to lead him to believe. In effect, he is guided by the authority of the divine teaching which miracles have confirmed and, moreover, by the interior inspiration of God who himself invites us to believe. Therefore the believer does not believe lightly. However, he does not have a sufficient motive to lead him to actually know and that is why the reason of merit is not taken away.¹⁰⁶

This response of St. Thomas places us squarely before the intellectual element of the act of faith. The human spirit does not believe without having grave and serious reasons for believing.¹⁰⁷ The above text gives us what the ingredients of our faith really are: an exterior proposition which does give us an evident credibility and an interior adherence which is aided by divine inspiration, which gives the soul its interior illumination. But then, where does the merit reside in believing if there are so many reasons to believe? It resides in the fact that these reasons for belief are never such that they cause us actually to see the object of our faith directly or even to know profoundly the mystery of our faith. Hence, the interior inspiration by God is alone sufficient to induce man to accept the faith and its truth.

St. Thomas gives us no indication on the way the Holy

¹⁰⁶ *In Joan.*, c. 4, lect. 7, n. 8.

¹⁰⁰ *Summa Theol.*, II-II, q. 11, a. 9, ad 8.

¹⁰⁷ St. Thomas concludes this section by saying that the incredulity of the Jews would have been just as culpable even if there had been no miracle—a very disputed theological point. Cf. *Summa Theol.*, I-II, q. 100, a. 4, ad 1.

Spirit moves the soul interiorly, but he has this to say concerning the Spirit himself:

As the Apostle says of those who are moved by the divine instinct, it is useless that they seek further confirmation from human sources. Let them follow their interior instinct, for they are moved by a principle which is preferable to human reason.¹⁰⁸

Thus any analysis of the act of faith poses no great difficulty for St. Thomas/⁰⁹ since it is very natural for the believer to rely on the Divine Word for any proof of his belief: "not because of anything else but God himself."¹¹⁰ Moreover, we do not need to have a knowledge of natural truths before believing, something which might otherwise be logically presupposed for the act of faith.¹¹¹

A miracle, of course, cannot bestow faith on the person who sees the miracle. Certain favorable dispositions are necessary and indispensable to appreciate its value and to draw from it consequences for the faith.¹¹² In the face of a miracle one must always ask whether one is in the presence of a diabolical trick, for demons can perform various prodigies. Thus the aid of divine grace is necessary to discern with certitude that one is in the presence of a true miracle in favor of faith.¹¹³ Hence, a miracle alone does not and cannot prove that the one who performs the miracle is sent from God as his prophet and messenger—especially when he preaches in contradiction to the true doctrine of the Church:¹¹⁴

Neither the view of a miracle nor a persuasive word . . . are sufficient cause of the faith of the believer, and the proof is that, among those who see the same miracle and listen to the same words, there are those who believe and others who do not; that

¹⁰⁸ *Ibid.*, I-II, q. 68, a. 1.

¹⁰⁹ *De Verit.*, q. 14, a. 1.

¹¹⁰ *Ibid.*

¹¹¹ "Ad hoc enim sufficienter fides inclinatur ut qui rationem ad hoc habere non potest, fide eis assentiat." (*III Sent.*, d. 24, q. 1, a. 3, ad 1.)

¹¹⁰ *De Pot.*, q. 6, a. 9, ad 17.

¹¹³ *III Cont. Gent.*, c. 154.

¹¹⁴ *Ibid.*

is why we must admit another cause, interior to this one, bringing man interiorly to adhere to what is of faith.¹¹⁵

In other words, motives can give various types of certitude and St. Thomas explicitly recognizes this;¹¹⁶ but no one can give an absolute certitude, and that is why he often uses the term *opinio* in this respect. The term is described variously as *opinio vehemens*, *opinio fortificata*, *opinio rationibus constructa*, all of which constitute a "probable certitude" which can be produced by sincere testimony.¹¹⁷ This is the the strongest natural certitude which St. Thomas knows. Thus it is possible in certain circumstances to attain a very real natural certitude of the fact of Revelation, but there is not for man any natural evidence for this, and hence only the intervention of God's grace can procure an absolute certitude for him.

Thus the whole theology of faith in St. Thomas is centered in a religious and supernatural context, as we have seen was the case for St. Augustine. There is a large place for the rational and for reason in the act of faith, but these acts of natural reason accompany faith without being in any way its true cause.¹¹⁸ The true cause of faith can only be the interior divine action of God himself, the First Truth.

Faith has certitude from the divinely infused light ... The principles of faith are known by the divinely infused light.¹¹⁹

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¹¹⁵ *Summa Theol.*, II-II, q. I, a. 6.

¹¹⁶ *III Sent.*, d. 24, a. I; *Summa Theol.*, II-II, q. 5, a. 8.

¹¹⁷ "Quae in pluribus veritatem attingat etsi in paucioribus a veritate deficiat," *Summa Theol.*, II-II, q. 70, a. 2.

¹¹⁸ *De Verit.*, q. 14, a. 2, ad 9.

¹¹⁹ *In Joan.*, c. 4, lect. 5, n. 2, and J. Alfaro, "Faith", *Sacramentum Mundi: An Encyclopedia of Theology*, 2 (New York, 1968), p. S17.

BOOK REVIEWS

The Trinity. By KARL RAHNER. Translated by Joseph Donceel. New York: Herder and Herder, 1970. Pp. 120. \$4.95.

It has become commonplace to lament the neglect of theological treatment of the mystery of the Trinity. Lonergan and Rahner stand nearly alone as exceptions to the failure, at least as far as constructive theology, in distinction from biblical and historical theology, is concerned. Each brings to his endeavor a common commitment to Transcendental Thomism, a qualified Kantian hermeneutic of St. Thomas initiated by Joseph Marechal. Lonergan's work is more in continuity with traditional Augustinianism-Thomism; if the methodology differs markedly, at least the same set of questions is raised. Rahner, in contrast, strikes out more originally and offers a newer alternative to Lonergan's study; he accepts the achievement of St. Thomas as an authentic, in-depth illumination of the mystery, but he sees little advantage for the contemporary faith-quest in remaining within the categories that suited an earlier moment of faith-consciousness. His is more an attempt to surpass the Thomistic synthesis without denying its own principles of intelligibility. His departure from a traditional approach, however, is hardly as radical as that of Robert Melville ("Creation and the Trinity," *Theological Studies*, March, 1969), and it attempts to harmonize continuity of dogma (the definitions of Nicaea, Lateran IV, Lyons, Florence) with genuine newness of theological concept and language. In part, this is accomplished by recovering a pre-Augustinian, Greek rather than Latin, mind-set in contemplating the mystery. What really dominates Rahner's thinking (or re-thinking) throughout, however, is German *Existenz Philosophie*, or at least that ontology of existence deriving from Heidegger that has taken such deep roots in Continental Catholic thought (and somewhat differently in Reformed and Evangelical theology).

The present volume is a translation of Chapter Five of the Second Volume of *Mysterium Salutis* published in 1967. This prompts the question as to why the publishers chose to not include the earlier chapters, reputable in their own right, for example, those on the Trinity in the Bible by R. Schulte and F. J. Schierse. It is a concise study dealing with three main points: 1) the method and structure of the dogmatic treatise itself (a re-working of the article in the *Schriften--Vol. IV* of *Theological Investigations*); 2) the official doctrine of the Church; and 3) Rahner's own attempt at a new synthesis. This entails such economy of treatment that central structural elements are too often merely stated, resulting in highly convoluted, at times torturous, literary expression that renders trans-

lation exceedingly difficult. This may account for using the word "monotheism" as opposite to Trinitarianism, when seemingly the more proper term in the former case is "Unitarianism," and referring to the Persons as "different" (p. 101) rather than "distinct," which prior term at least connotes distinctness of essence. Likewise, to write that "the Father communicates Himself" (p. 102) suggests that the Father, though identified with his own essence, communicates that essence precisely as distinctly subsistent in a way constitutive of Fatherhood. Generally speaking, there is a tendency to be overly polemical and negative towards traditional Trinitarian theology; the charge of neglecting the Trinity of the "economy" is well taken, but it is a rather sweeping dismissal to assert: "in the usual presentation of the scholarly treatises on the Trinity, there is *first* developed a concept of "person" derived from experience and philosophy" (p. 43) This is not the case in St. Thomas's tract in the *Summa Theologiae* where "person" is the last of the three formal concepts to emerge (the other two being procession and relation), and this is true generally of the other classical thinkers.

These, however, are negative remarks and may seem somewhat picayune. In a more positive vein, it is possible to single out the following central structural elements in the first two sections of the book. 1) The triune character of God is unconcealed for us only in a revelation that occurs as an *oikonomia*, i.e., the Word is uttered *to us* and the Spirit is breathed forth *within us* ("in reality the Scriptures do *not* explicitly present a doctrine of the 'immanent' Trinity"; p. 22). 2) Faith-reflection manifests that God is this Trinity within himself, i.e., the "economic" Trinity is the "immanent" Trinity. 3) God of the New Testament (JE6,- (and so Elohim and Yahweh of the Old Testament) is not the Godhead or the Triune God but the First Person of the Trinity. 4) The creative and saving activity of God *ad extra* is necessarily Trinitarian, not simply in the sense that the Three who act retain their hypostatic ordering (to one another but rather that "when God freely steps outside of himself in self-communication . . . it is and must be the Son who appears historically in the flesh as man. And it is and must be the Spirit who brings about the acceptance by the world . . . of this self-communication." (p. 86) 5) On the above assumption, sanctification cannot be merely "appropriated" to the Holy Spirit but is in a genuine sense proper thereto; indeed "each one of the three Divine persons communicates himself to man in gratuitous grace in his own personal particularity and diversity." (pp. 34-35) All of this amounts to a considerable nuancing of the traditional formulations in which a Western mentality has dominated. It betrays a decidedly Origenist character, and on the spectrum of orthodox theological *sententiae*, ranging between the opposite heterodox extremes of Modalism and Subordinationism, certainly faces towards the latter.

This does pose the question as to whether or not the distinctness of Persons is not being *conceptually* overstressed. Two indications of why that question might be validly raised can be noted here. First, is the hesitancy felt in the face of statements such as "the Father and the Spirit subsist in pure distinction from--not *in* equality with--the Son...." (p. 12, Note, italics supplied) To speak of one absolute subsistence in God does seem misleading (as Rahner observes, p. 84, Note), but is it not equally ambiguous to speak of the three relative subsistences in abstraction from the numerically one essence? Surely this is what Rahner means: that real distinction in God is purely a matter of mutual relatedness without taking into consideration the essence. But the Persons subsist in relative distinction *and* in essential identity. St. Thomas's caution on this point is that *subsistentia* (or *persona*) predicated of God signifies relation, not formally as relation but as obliquely connoting essence: "*persona significat relationem in recto et essentiam in obliquo; non tamen relationem in quantum est relatio, sed in quantum significatur per modum hypostasis*" (*Summa Theol.*, I, q. 29, a. 4). Another way of saying this is that the integral notion of relation involves not only the aspect of *esse ad* but that of *esse in* as well.

Second, there is Rahner's understanding of the grace state as essentially Trinitarian in structure (point 5, above). With the fact there can be no dispute, but the terms of theological explanation still appear today to demand an option between two opposed positions; the presence of and communion with each of the Divine Three in their proper, hypostatic character must be seen as either intentional or ontological in kind. Rahner, finding the former inadequate and inclined to understand it as ultimately reducible to mere appropriation, opts for the latter. Unquestionably there has to be some ontological basis for the intentional union, and moreover this can be achieved only in virtue of divine causality. The problem lies in whether or not this causal influx can be ascribed to each Person in a proper and unique way without denying thereby the unity and simplicity of the divine essence which subsists triunely. Rahner is entirely logical in refusing to explain this personal self-bestowal in extra-causal categories. In terms of efficiency there can be no question here of three causalities but only of one causality that subsists in a threefold real but only relatively distinct manner; such causality, being the *ipsa substantia Dei*, is hypostasized triunely. But is there room at the heart of this for (in Rahner's phrase) a "quasi-formal" causality on the part of each Person?

The controversy is by now a long-standing one and need not be reopened here. It must be said, nonetheless, that the Melchizedek-like phrase "quasi-formal causality" can readily be given place in an intentional theory of presence wherein each Divine Person is objectivized to the graced soul as term of its cognitive and affective striving, thereby exercising a specifying causality that is reductively of the formal order. On the other

hand, Rahner is by no means convincing in his attempt to extend the formula to ontological presence, where it would mean that the Persons are somehow intrinsic "forms," within the soul in an entitative (though accidental) way. At bottom, I am inclined to think his discontent with mere intentional presence is rooted in the Transcendentalist tendency to equate being with knowing.

Intentional union is in fact greater than that which is strictly entitative; when the knower and the known become one (and correlatively the lover and the beloved) the perfection and actuality of the known and loved become that of the knower and lover. Moreover, since the presence here is achieved as a result of the dynamism of the human subject, there is question not simply of a pure formal union of the intentional order but of an underlying tending, both cognitive and affective, of the human person to the Divine Persons, i.e., of an intersubjectivity which becomes through grace connatural to the human subject.

It is in the final section of the book, however, that Rahner attempts his own original synthesis. Its dominating principle is that the one self-communication of God is characterized by two distinct, inner, mutually related moments. (cf. pp. 84-85) This dual communication-known by faith in the Incarnation and the descent of the Spirit-can be experienced in terms of four double aspects: origin-future; history-transcendence; offer-acceptance; and knowledge-love in which the first members of each set on one hand and the second members on the other constitute a unity. It is the nature of man as the one to whom God communicates himself that accounts for the tension between these moments in each instance, i.e., *origin* explaining the gratuity of the communication versus *future* bespeaking its historicity in man; *history* as the presently achieved conditions of grace versus *transcendence* as the open horizon of grace in man who is still becoming; the *offer* of grace versus its *acceptance* in freedom; and, finally, *knowledge* versus *love* because these constitute a transcendental duality-they are "originally distinct and neither can be considered as a *mere* moment of the other." (p. 93) This bipartition in the bestowal of grace reflects the duality of the "economic" Trinity (the missions of the Son and the Pneuma) and sheds light on the two non-free intra-Trinitarian processions. What Rahner is saying in essence is that God's self-donation to man is at once, but distinctly so, historical and historic. God's presence and concrete "thereness" in the world of time and space is itself the opening up of a future that is not merely evolutive and so pre-empted in the beginning but genuinely historic (a process that is not *historisch* but *geschichtlich*). The tension here is not arbitrary but mirrors an analogous and real opposition in God himself. Necessary recourse to an Unoriginate Source to explain both the two processions and the two missions completes the Trinity.

One implication of the approach Rahner here adopts is an eschewing of

the term "person"—a word "not absolutely per se necessary to faith" (p. 104)—in favor of "distinct manner of subsisting." (p. 113) But just how much of a gain is this? It does serve to preclude the tendency to think of three conscious subjectivities in God; moreover, Rahner does explicitly preclude any Modalistic interpretation of the formula. Less certain is whether "manner" or "mode" adequately safeguards the Divine Simplicity (at least in the popular mind), and whether the precise meaning of "subsisting" is any less alien to contemporary man than that of ontological "person." It is questionable whether we can make do without recourse to "persona," "hypostasis," and "subsistentia" in the highly refined intelligibility these words began to assume for Christian faith from the time of the Cappodocian Fathers in the East and St. Hilary in the West. Strangely enough, little attention has been paid by contemporary writers to the relationality that is indigenous to these terms, for example, in the Thomistic tradition as represented by Capreolus and in the gnoseology of Merleau-Ponty.

At any rate, Rahner's achievement here is constructive, of high originality, and profoundly illuminating. If it only opens the way to work yet to be done, it does mark a recovery of the speculative challenge in Trinitarian theology. St. Thomas noted that only an understanding of the Trinity provides the key for unlocking the mysteries of creation and salvation (*Summa Theol.*, I, q. 32, a. 1, ad. 3)—thus the immense consequences of this theological endeavor of Rahner.

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Early Christian Fathers. The Library of Christian Classics, volume I. Ed. by Cyril C. Richardson. New York: The Macmillan Company, 1970. Pp. 415. \$2.95.

The Macmillan Company of New York and Toronto has at last undertaken to reprint in paperback form some of the excellent translations which first appeared in the Library of Christian Classics published by the Westminster Press of Philadelphia. The present volume, as edited by Dr. C. C. Richardson, the distinguished Washburn Professor of Church History at Union Theological Seminary in New York, still remains the superb, solid piece of work it was when it first appeared in 1953.

The editor has distributed his chores as follows: E. R. Hardy has the difficult *First Apology* of Justin Martyr and some important selections from Irenaeus; E. R. Fairweather translates the anonymous *Epistle to*

Diognetus; M. Hamilton Shepherd handles the *Epistle of Polycarp* to the Philippians, as well as the moving anonymous document called the *Martyrdom of Polycarp*; and the editor himself, with the lion's share, wrote the general Introduction, and translated the *Epistles* of Ignatius of Antioch, the *Didache*, the *First and Second Epistle of Clement* (so-called), and the *Embassy for Christians* of Athenagoras. In accord with the policy of the series, the special introductions which preface each section discuss the major problems connected with each work and supply a very ample bibliography (up to 1950); but for further literature the student can easily consult the bibliographies of Altaner and Quasten, F. L. Cross, *The Early Christian Fathers* (London, 1960), as well as the reviewer's Mentor-book, *The Fathers of the Primitive Church* (New York, 1966). There are also the parallel volumes which have appeared in the Penguin-Pelican series, *Ancient Christian Writers*, and the Fathers of the Church Series.

The Richardson text can still serve the serious student as a first-rate initiation to the problems of early Christian literature; of related texts it only lacks the *Epistle of Barnabas*, Hermas, the *Acts of the Scillitan Martyrs*, and the account of the martyrs of Lyons and Vienne under Marcus Aurelius. Of course, it is only natural that a number of problems have somewhat changed in emphasis over the course of the years: the theology of Ignatius, the problem of the early martyrs, the *Didache*, the structure of the *Epistle to Diognetus*. Methodius of Tyre, as he is here called, is now more correctly referred to as Methodius of Olympus; and it is less certain now that Athenagoras' speech (which Richardson translates as "A Plea") was really a fiction and not actually delivered: see the note by J. H. Crehan in his volume on Athenagoras in *ACW* 9:3 (Westminster, 1956), p. 9!7. But these are minor points which merely serve to make the study of the early Church all the more fascinating.

It would appear that with the trend of Catholic theology since the Second Vatican Council there was a certain neglect of the patristic writers' sources, at least in the English-speaking world. This, it would seem, was a sad mistake. Let us hope that the reappearance of the present text, in a series which was one of the pioneers in patristic translations in America, will augur a welcome renaissance in the study of those precious sources that are preserved in the treasury of ancient Christian literature. For the student will find that the Richardson text will prove a very useful key to unlocking a long neglected hoard. The volume is well-indexed and heavily bibliographical; and it is to be hoped that the entire series of Westminster translations can be reprinted by Macmillan in the same format, and that teachers and students will offer encouragement to the publishers to keep such invaluable books of reference available at all times.

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Theology of Ecumenism. Theology Today Series: 9. By MICHAEL HURLEY,
S. J. Notre Dame: Fides Publishers, 1969. Pp. 96. \$0.95.

Within its small compass this is an admirable book. Perhaps the title is misleading, since it is not really occupied with a discussion of ecumenical problems, such as the Churches are faced with today, or with the origins and progress of the ecumenical movement. It deals in the main with the ecumenist himself, the reasons why he should be impelled in his search for ecumenism, the obstacles he will have to overcome in his search, the real impediments against a coming together as against the reputed obstacles to reunion, the line to be followed in drawing prospective converts to the Church, the crucial necessity for the Church herself to be always striving for *aggiornamento* as the one real objective of ecumenism. You finish each chapter with a sense of satisfaction; each follows in logical order, dealing with the common objections to a hope for reunion and reviving faith in what appears to be a desperate case. Immediately after the Second Vatican Council hopes were riding high and reunion of the Churches appeared to be just around the corner; but as the years have gone by, as the difficulties have not diminished in any way, as the road seems to be without end, and the short cuts to unity such as inter-communion have been ruled out of order, hope is giving way to despair; on many sides there is the inclination to throw down the sponge and to abandon a policy which appears devoid of any tangible results. The author revives both one's faith and one's hope.

What pleases me most in this treatment of the subject is the strong chain of reasoning, the arguments marshalled in order, so that it is impossible to avoid the conclusions, so well are they linked together; and yet the central point of this book is that the real obstacle to union is not difference in dogma, not even a different explanation given to articles of belief. The real obstacle lies in the historical development of the past, the prejudices and animosities that have been formed over the years, the unwillingness to accept that one has been wrong in the past, the irreconcilability of positions which have been reinforced by the consequences of history. The real differences do not follow from different beliefs; in fact, beliefs have so little to do with the attitudes of the various churches that their differences in belief can be reconciled in a short time when theologians and scholars meet and discuss these matters in an atmosphere of real honesty. But the factors which have really caused opposition and resentment in the past cannot be overcome except by charity, a realization that the true love of God must entail an acceptance of the truth whatever the difficulties, a real regret for our own sins of the past and a readiness to undo their consequences, a courage to shed prejudices which have grown up and become second nature. These are the roadblocks which human pride and human sensitivity have set up and which only the power of charity can overcome.

I have said that this little book is admirable: it is admirable not alone in its power of reasoning; it is yet more admirable in its healthy optimism, in its courage in the face of difficulties, in its readiness to confront the future whatever the snags might be. It is an admirable blend of reasoning and faith and is stimulated by a charity that is stronger than both.

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Il Corpo Mistico e le sue relazioni con l'Eucaristia in S. Alberto Magno.

By ANTONIO PIOLANTI. Preface by Andre Combes. Studi di Teologia Medievale della Pontificia Università Lateranense, 1. Rome: Pontificia Università Lateranense, 1969. Pp. 211.

The Lateran University's new series of monographs in medieval theology opens with a reprint of Msgr. Piolanti's 1939 study of Albert the Great's teaching on the Mystical Body. No changes are made except for the laudatory preface by Msgr. Combes and a new paragraph by the author.

A good introduction situates Albert within a third and fuller period of development of medieval theology on the Mystical Body. Piolanti then describes the many works containing Albert's teaching on this subject; unfortunately the *Mariale* and the *Sermones de Tempore et de Sanctis*, no longer accepted as Albert's works, are used in some areas of his study, which therefore needs revision in these places.

In the first of two main parts Piolanti organizes Albert's texts in a clear, generally satisfactory order, studying Christ as Head together with his members, the various causes of the union in the Mystical Body, and the consequences of this union. Albert teaches that, while Christ is Head of the angels, he is Head of men in the fullest sense because, besides being as God principle of their spiritual life (as he is of angels'), he has a conformity of nature with men. Christ's fulness of grace as Head originates from and is demanded by the grace of union but is formally constituted by his sanctifying grace. Lacking a concept of physical instrumental cause, Albert holds that Christ causes grace only by his divine nature: as man he influences the reception of grace by his members through his merit, mediation, and exemplar causality. These, plus sharing human nature itself, he includes under Christ's conformity of nature with his members: Piolanti, however, misinterprets the texts by equating conformity with exemplarity alone and by overlooking conformity of nature. (p. 68)

Albert enriches Anselm's theology of merit and satisfaction by empha-

sizing the mystical union with Christ of men who thereby share his merits and satisfaction. Members of the Mystical Body include not only men on earth but also the blessed in heaven and souls in purgatory. Sinners present a greater problem: they belong to the Mystical Body only through faith and as subjects of its authority (here and elsewhere Piolanti confuses issues by linking the Mystical Body with interior elements and the Church with exterior elements, a later view abandoned today). Albert's use of some of the scriptural metaphors (body, spouse, temple, vine) relating to Christ and his members is described all too briefly. His valuable discussion of the Holy Spirit presents this Person as a parallel operator of effects whose author is Christ, on whom he depends. Albert furthers the theology of the communion of saints by insisting that this is not, as his predecessors held, only or mainly a communion of sacraments but rather a communion of goods.

The second main part studies the important relationships of the Eucharist with the Mystical Body. Although Albert lacks great originality here, his personal inspirational style and approaches are interesting, as is his use of natural science to develop Eucharistic symbolism of the Mystical Body. For him the grace of unity by incorporation in Christ is the work of the Eucharist alone. As for the relationships of the other sacraments such as Baptism, Penance, and Matrimony, Albert develops in a number of texts a richer doctrine than the three texts quoted by Piolanti would indicate.

The author's presentation is clear and concise if sometimes repetitious. His interpretation of the texts is, with a few exceptions, accurate. Although Piolanti carefully situates Albert's positions within the history of theology, he rarely looks for possible development within Albert's own thought. His work has the merit of using Albert's less formal theological writings, but it treats insufficiently Albert's use of metaphor and analogy, and underplays his scriptural bases. Finally, the book is marred by well over a hundred printing errors that should have been corrected in a reprint.

Msgr. Piolanti's study was in 1939 a valuable contribution in the light of the scholarship and problematic of the Mystical Body at that time, and its reprinting at this time furnishes a still-useful guide to Albert's thought. But it is regrettable that the undoubtedly busy rector could not find time to revise his work in view of recent historical research and with an eye to contemporary insights into the Mystical Body that would have prompted him to further probings and research in Albert's doctrine.

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The Spirit and Power of Christian Secularity. Edited by ALBERT L. SCHLITZER, C. S. C. Notre Dame: University of Notre Dame Press, 1969. \$10.00.

This symposium makes a broad contribution to the current study of Christian secularity and the challenges implied in this. One notes the unconvinced attitude of many of the contributors as regards the claims of the new secular theology, as much as one feels with them the frustration about the secular-secularity-secularism vocabulary. For this reason, the title of the volume might seem a little pretentious. However, it is certainly a spirited and frank discussion of a vital issue; and certainly the book is of interest to the specialist in this field.

Martin E. Marty leads off the discussion with "Secular Theology as a Search for the Future." He gives a good documentation of the whole mood and aspiration of the thing we call "secular theology." He shows rather well that, as it seeks for a viable future, this theological strain does clarify some Christian emphases but leaves an element of confusion behind. It is a concentration on the future that refuses, in some degree, to face to the full eschatological dimensions of Christian hope.

William Cantwell Smith brings his historical erudition to bear in "Secularity and the History of Religion." (33-59) He admits the difficulty of defining both secularity and religion and therefore proceeds in an explanatory manner, studying the interrelation of the two terms in some of their possible combinations. His most interesting opinion is that this secular concentration is entirely normal in the history of religious experience in that the whole of reality is grasped and illumined by religious faith in some form or other. Illustrations are offered from the religion of the ancient Egyptians, from Hinduism, Buddhism, and Islam. Hence, a truly secular theology is by no means a modern concern, since all the great religions have been concerned for the whole of life. The danger is that the vital religious spirit can be evaporated and man be left with no overall view of reality and life.

Bernard Cooke follows with "Secularity and the Scriptures." (71-87) He briefly points out the inclusive power of faith in the Old and New Testaments. The Old Testament accepted God as the Creator and sees him acting within the events of history; it shows how the Chosen People accepted and incorporated the secular realities of the kingship and the Wisdom teaching. In the New Testament, there is the fundamental event of the Incarnation embracing all aspects of the world. A secularity does emerge that is a challenge to a truly Christian theology: the whole world is claimed by God in Christ. From this there flows the necessity of considering everything in relation to Christ.

Louis Dupre takes up "The Problem of Transcendence in Secular

Theology." (100-113) He admits that the Transcendent cannot be named on purely empirical grounds, but he demands that there be an affirmation of the Transcendent as a logical outcome of the religious act. This act requires a commitment. And such a commitment must be to a transcendent reality. Otherwise there is no reason why anyone should give a special place to Christ when he demands man's fidelity. Dupre makes interesting comments about the parallel between secular theology and the negative element in traditional theological thought, though he admits the cause of the negation is different: in the latter, the very sense of the Transcendent; in the former, the exaltation of human autonomy. He goes on to say that, in our times when there is such an acute sense of the contingency and relativity of man, it is not the time to play down the presence of the Transcendent in human existence no matter how "secular" one's theology might be.

"Secularization and Sacrament: Reflections on the Theology of Friedrich Gogarten" (123-144) is the contribution of Theodore Runyon. He attempts to gain a surer understanding of the secular movement, and of God-man relations through a use of the analogy of the Eucharist, and the sacraments in general. Though he rejects what he terms the medieval understanding of the Eucharist in terms of transubstantiation, he does admit a more "secular" understanding of Eucharistic presence. Man must live in the utter relativity of faith, yet at the same time he can experience the world as the sacrament through which God gives himself. The Eucharist is a celebration of this mediation of God's presence through the secular.

E. Schillebeeckx presents "Silence and Speaking about God in a Secularized World." (156-180) He illuminates the origin of the God-less presuppositions of modern thought. On the other hand, he stresses that the phenomenon of an increasing control over the resources of the world is not necessarily committed to an atheistic interpretation. However, we must seek out new ways of speaking about God, especially by legitimating the basic religious question. This is to be done by analyzing the pre-reflexive trust that people have in the goodness of life and in the promise of the future. In this way, theology will begin to speak once more about God from the depths of human experience.

An appendix, "Israel's Moment of Freedom," by Walter Brueggemann concludes the book. (201-213) Interesting contrasts are drawn between the comprehensive secularity of David and the stifling secularism of Solomon.

Each contribution is followed by a well reported discussion. Here many illuminating comments are made by the rather prestigious list of participants. Many issues and much intricate discussion obviously arise out of theology's current "secular" concentration. Nonetheless, it emerges

rather clearly that the real issue is the Incarnation; not so much how the Incarnation can be fitted into a modern world view but how the modern world in all the exuberance of its hope and achievement as in all its experience of triviality and failure can be seen to stand already "in Christ." The question must be asked, "What is the reality of a world made in and through and for Christ?" . . . how does God claim our world as his Own?

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The Nature of Philosophical Inquiry. Edited by Joseph Bobik. Notre Dame, Indiana: University of Notre Dame Press, 1970. Pp. 312. \$9.50.

Four years ago, Notre Dame inaugurated a lecture series which yearly brings four or five outstanding philosophers to its campus, each for a week of lectures, seminars, and talk. The topic that year was the nature of philosophical inquiry, and the speakers were Stephan Korner, Martin Versfeld, A. J. Ayer, Stephen Pepper, and O. K. Bowsma. The present volume, ably edited by Joseph Bobik (who contributed a helpful summarizing Introduction), contains the public lectures, three from each philosopher except Korner, who condensed his three lectures into one. Perhaps the most useful thing a reviewer can do is to sketch a rough map of the ground covered by each of the lecturers.

For Korner, the task of philosophical inquiry at its highest level, the task of the metaphysician, is to deal with "categorical frameworks," the categorization of what *is* and what is *knowable*, the *a priori* assumptions which underlie what we say. The metaphysician has the empirical task of exhibiting the frameworks proposed by various philosophers; and, in particular, Korner argues that neither the method of phenomenological analysis used by Husserl nor the method of philosophical analysis is autonomous, for each can be shown to employ unquestioned *a priori* framework assumptions. The metaphysician also has the job of modifying old, and proposing new categorical frameworks: there is none that is absolute, none is satisfactory for all human thinking at all times.

Martin Versfeld, who describes himself as "most at home in the atmosphere of existential phenomenology," develops and subscribes to Platonic philosophy as he understands it. To philosophize is to come to know oneself, to grow in rational self-consciousness. The modern world adds to Plato's insight a stronger sense of history and of the significance of time; and so today we regard metaphysics as an essentially historical discipline

which matures progressively, not only in the individual but also in the human race. Versfeld also characterizes the philosopher as one whose desire is to know the truth about truth, a desire which, however, can never be fully satisfied since it is only in knowing being that he can know truth-and he can never know being fully. He concludes with a lecture in which he develops and defends the classical doctrine of truth as *adequatio*; for if there is a discipline such as metaphysics, a search for the truth about being, it is only *adequatio* which describes its nature as *metaphysical* knowledge.

A. J. Ayer proceeds to pin down the special province of philosophy by arguing against the tenability of the following current views: the philosopher deals with reality as a whole; or, is a sage good at telling people how they ought to live; or, is one who judges the pronouncements of those, ordinary men and scientists, who investigate the world at first hand. The philosopher is rather one who clarifies, one who analyses what we say. But this is not all. For the words we use carry a theoretical loading, and it is not clear that the common sense conceptual scheme underlying common usage is to be preferred to all other conceptual systems or theoretical backgrounds. The most preferred conceptual system or background or metaphysics is that which best meets the criteria of intelligibility, explanatory power, and convenience; such systems are judged as instruments rather than as ways of seeing more clearly into the nature of reality. Of the four theoretical backgrounds which Ayer considers, one, absolute idealism, has most difficulty in achieving intelligibility; another, divine agency, fails to explain; and of the remaining two not eliminated, one, physicalism, is to be preferred to the other, Berkeleianism, on the grounds of convenience in saying what we want to say, problem solving, etc.

Stephen Pepper argues that the method of philosophy is the method of hypothesis, of tentative search for insight; and that which characterizes philosophy by contrast with science is comprehensiveness of hypotheses, the fact that hypotheses are *world* hypotheses. There are a limited number of such world hypotheses, each developed out of a root metaphor or basic model, each an attempt to furnish a comprehensive insight into the world. Pepper particularly discusses his "new" world hypothesis (and how he arrived at it), "selectivism," developed from the metaphor of the means-end relation, whereby the power of the drive for the end charges the drive for the particular means which gets us to the end. Pepper also discusses analytic philosophy, which he finds does not take adequate account of the fact that common sense is a domain partly characterized as one of confusion, vagueness, and contradictions, offering only partial, not comprehensive, insight. His last lecture is a discussion of Sartrean existentialism as a world hypothesis, which he evaluates as being like mysticism in lacking "scope," in not taking into account all the facts; Sartre's existentialism is, though, permanently valuable as subsumable

under selectivism in its descriptive analyses of human purposive activities.

O. K. Bowsma, like Wittgenstein, sees the main task of philosophy to be that of dispelling by plain talk various "misunderstandings," illusions of sense and understanding. He proceeds not so much like one who, standing back and looking at philosophy, reports what he sees but rather, by exhibiting philosophy in action, *demonstrationes ad sensum* of Wittgensteinian analysis. He displays the art of dispelling illusion in probing for the misunderstanding involved in asking a question like, "What is consciousness?"; in Descartes' *Cogito*; and, at length, in Anselm's ontological argument, which leads him to the conclusion that Anselm lifted a collection of sentences out of their natural home in Scripture and put them in new and strange surroundings-in which environment they cause all sorts of difficulties.

One gathers from the Preface that there will be other volumes coming from the Notre Dame lecture series and that we can anticipate sets of lectures, similar to this excellent collection, on approaches to ethics, on the historiography of philosophy, and on epistemology.

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Christian Philosophy in the 20th Century. An Essay in Philosophical Methodology. By ARTHUR F. HoLMES. Nutley, N.J.: The Craig Press, 1969. Pp. 57. \$4.95.

The subtitle which the author has given to his work, *An Essay in Philosophical Methodology*, identifies for the reader the nature of his proposal. It is not a question of history, or of Christian philosophy in the twentieth century, or of discussions of which Christian philosophy was the object notably during the last forty years. The author intends to define what a Christian philosophy ought to be today in view of the situation created by the currents of contemporary philosophy. He is convinced that Christian philosophy must exist; its features must be determined. Rather than engaging in theoretical discussions, the author applies himself to creating before our gaze the image of Christian philosophy such as he has conceived of it, by means of an *historical dialogue*, that is, the concrete confrontation of Christian thought and the philosophical currents of our time.

The idea of Christian philosophy, which is clarified little by little in the course of this work, is sketched out in the first chapter which serves

as an introduction. To accept the idea of a Christian philosophy is evidently to reject the dilemma: either Christianity or philosophy. (p. 2) **It** is thus to recognize that Christian faith must exercise an *internal* influence upon reason, transform life, thought and the view that it brings to the world, "interpret the meaning of all things in the light of the revelation which God has made of himself in Christ." (*ibid.*) Christian philosophy should not be, however, a crypto-theology. **It** differs from theology in its *method*, which is philosophical, and in its *matter*, since philosophy is not concerned with certain problems of the theological order, and, on the other hand, certain philosophical problems have no theological interest. (*ibid.*) **It** differs from the philosophy of religion in the extent of its horizon. **It** indeed embraces all philosophical disciplines. **It** is sensitive to the influence of the Christian perspective, although certain philosophical problems are not susceptible of being treated or clarified by the Christian faith. (p. 3)

Christian philosophy thus remains truly philosophy, but "philosophy framed from a perspective which is its own." (*ibid.*) **It** is philosophy, since it is open to the array of objects envisaged by philosophy. **It** is not the whole of philosophy but one tradition beside many others and, like the other traditions, it is pluralistic. For it must, as all philosophy, confront horizons which are ever changing by expanding, because a true philosophy does not exist which does not need ceaselessly to criticize itself, to renew its formulas and its expressions, in a word, to refine itself. (p. 3-4) Holmes continuously returns to and clarifies throughout his work the perspectivist and pluralist conception of philosophy in general and of Christian philosophy in particular. He comes back to it *at length* at the end of the first chapter (p. 29-38) after having reviewed the recent polemic between the partisans and the adversaries of the historical existence of a Christian philosophy, in the patristic era and in the Middle Ages (negative response of Brehier, Wild, Dooyeweerd), with the Reformers or with modern philosophers such as Descartes, Kant, Hegel (p. 8-15) and having discussed the conceptions of Blondel, Gilson, Maritain, Nedoncelle, Dooyeweerd, Gordon Clark. (p. 15-28)

The perspectivist and pluralist conception of Christian philosophy defended by Holmes is put to the proof in the course of the work by confrontation with the situation created in philosophy by recent changes. Chapters 2-4, which represent more than half of the work, are dedicated to the examination of the present state of philosophy which is characterized by the revolt against scientism (chapter 2) and the appearance of two new philosophical methods: existentialism and phenomenology on the one hand, (chap. 3) and analytical philosophy on the other. (chap. 4) These new philosophies are opposed to the classical metaphysic. Holmes, however, thinks that they are open to some authentic metaphysical perspectives, and even more, that they necessarily imply metaphysical positions. The

two final chapters endeavor to draw out a conception of metaphysics which satisfies the demands of contemporary thought, while avoiding following them in their erroneous conclusions, a conception which avoids, on the one hand, rationalistic and scientific dogmatism and, on the other hand, skepticism and relativism. Such conceptions are indeed equally incompatible with Christian philosophy as well as with the demands of contemporary philosophy.

I have summarized with great care the contents of Holmes's work. It is difficult to say more without becoming involved in developments which go beyond the limits of a book review. Right to the last page Holmes's exposition proceeds in the form of a confrontation with the most diverse philosophical positions, from Descartes to Casserly and Dilley, through Kierkegaard, Nietzsche and Dilthey, Jaspers, Husserl and the different forms of existential phenomenology, Russell, Moore, Wittgenstein and other representatives of analytical philosophy, and, finally, a good half-dozen contemporary metaphysical theorists. Consequently, the work offers the positive benefit of a vast and well-documented panorama of a great part of modern and contemporary philosophy. Its unity is assured by the general conclusion which emerges and which consists essentially, it seems to me, in the fact that contemporary philosophy has broken with the cult of system, and, more particularly, with a form of speculation in which the human subject figured uniquely as the builder of the system. The problem of the *raison d'être* and end of human existence becomes part and must become part of philosophy, if one asks of it not only coherence but also truth, and in particular truth regarding the destiny of man and the universe.

It is difficult not to agree immediately with the author on this point. Consequently one would also immediately admit that Christianity, which is essentially a revelation concerning the true salvation of man, finds itself today in a new situation with regard to philosophy in the measure in which philosophy affirms the need to take into consideration the question of the meaning and the "why" of human existence. Thus Christianity is actually in a more favorable condition to encounter philosophy helpfully and to direct it towards its true "perspective." A philosopher who puts himself in the Christian "perspective," who consequently accords to the faith the primacy which belongs to it, without impairing the rigor of philosophical interrogation, represents the Christian philosopher demanded by the present situation. No doubt, as Holmes says so well, (p. 33) his message will have the best chance of being heard and taken seriously.

What, however, will be the philosophical content of his message? On this point Holmes shows himself to be comprehensive. This is deliberate, seeing that he holds for, as we have said, pluralism as part of the human condition of philosophy. This is not then, on his part, a concession to relativism, of whatever kind it might be, but the expression, it seems to

me, of the evident disproportion which exists between the totality of the aim of philosophy and the limited character of the approaches permitted the human spirit. Everyone should recognize, I think, that the era of a unique, adequate philosophy will only dawn the day when human discourse shall have succeeded in identifying itself effectively with the totality of reality and of the purpose which is pursued throughout its long history.

Within the limits of which he must be conscious it remains for the Christian philosopher to justify theoretically the choice which he will make of this or that "perspective." The final section of the work (p. 226-240) considers the specific criteria of "the philosophical decision." Holmes refuses, with reason, to allow patterns of thought, conceived for other tasks, to determine *a priori* that which must be, in philosophy, either conformity to experience or logical coherence, whose necessity is certainly imposed here as for all knowledge of truth. But the truth sought by philosophy, Holmes repeats once more, has reference to human existence in its totality and to the universe in its totality. (p. 227) Thus it also has its own criteria of validity.

In the final analysis, it is a philosophy of the nature of philosophy which Holmes gives us, intended for the philosopher who today will want to call himself a Christian as much as a philosopher. His philosophy will not be systematic, in the sense that one understands rationalism, nor purely historical or existential without the search for a truth susceptible of being demonstrated. It includes the fundamental problem of the meaning of human existence, without neglecting however other forms of truth. It is a total philosophy the idea of which is present everywhere in the work of Holmes and of which we are shown how urgent it would be to define the epistemological status. A metaphilosophy, whose necessity is enjoined, and which could exploit many of the avenues of approach. Among them must be included, besides those already used by Holmes, those of Gadamer for example, that is, philosophers of the hermeneutic school who have been inspired by Heidegger.

Before concluding, I would like to make a remark concerning St. Thomas Aquinas, as the title of this journal, *The Thomist*, invites me. I will not insist on the citations borrowed from Dooyeweerd (p. 23) and Wild (p. 8-9). The latter citation especially is so surprising that it seems to emanate from some impassioned caricaturist rather than from a *scholar* anxious to understand objectively the author of whom he is speaking. I would rather recall that in St. Thomas there are two forms of truth which together constitute the whole field: speculative truth on the one hand, practical truth on the other. The latter, which St. Thomas sometimes also calls *veritas vitae*, is not that of the artisan, hence of the technician, but of the human being who judges according to a right appetite when it is a matter of making a decision in the moral order. For St. Thomas, ethics is a matter of truth, not firstly of the will, even the will

of the legislator. A somewhat attentive reading of the tract on prudence in the *Summa Theologiae*, clarified in case of need by the excellent commentary which Pere Deman has given in the French translation published by the *Revue des Jeunes*, suffices for arriving at an understanding of the importance of this mode of truth, and that it corresponds exactly to the existential truth whose necessity contemporary philosophy has so correctly underlined. Theological rationalism in general, but also voluntarism, to which the advent of legalism in moral corresponds, allowed us to forget the existence of the *veritas vitae*, its specific character, its indispensable role in the constitution of a human being authentically oriented to the last end. But it is also the notion of orientation to the final end which would have to be recaptured in order to rid it of so many erroneous interpretations of which it has been and of which it continues to be the object. In any case, it is to the ensemble: speculative truth *and* practical truth, that our contemporary problem of philosophic truth must be brought back. Many perspectives would be modified by it.

Mr. Holmes invites us to reflect on the synthesis of different forms of truth in their unity with a view to defining the status of Christian philosophy. I would wish that, after this work whose aim seems to have been above all to clear the ground, he will give us the positive contribution for which the present work gives us hope.

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Language and Illumination. Studies in the History of Philosophy. By S. MORRIS ENGEL. The Hague: Martinus Nijhoff, 1969. Pp. 150. 19.80 guilders.

Even though all these essays have appeared at least once before in print, it is useful to have them drawn together here, mainly because Dr. Engel has a somewhat off-beat approach that deserves the reinforcement that this book affords. He characteristically brings his scholarship in the literature of the history of western philosophy into contact with current interests among philosophers of language. Thus in contrast to the frequently ahistorical bias of many linguistic philosophers today, his studies add a sense of depth-and challenge-to contemporary concerns.

The "illumination" of the title works in both directions, I think: from present to past and from past to present. The first two essays, for example, on the linguistic theories of Hobbes and Locke, respectively, assume the standpoint of modern interests and techniques. Hobbes's credentials as semantical analyst are considered and found not, after all, to be so im-

pressive as some current thinkers suppose. Engel argues that Hobbes was less interested in dispassionate logical analysis than in the substantive defense of his philosophical position. Locke, in contrast, is defended as much more sophisticated-if the whole context of his discussion of language is considered-than modern conceptual analysts normally notice.

In the other direction, from past to present, Engel raises pertinent questions about the adequacy of current linguistic philosophy on the strength of stubborn historical facts that fail to fit modern doctrines. His study entitled "Isomorphism and Linguistic Waste," to choose the best example, challenges the widely accepted view that "category-mistakes" and "systematically misleading expressions" (to use two of Gilbert Ryle's famous formulations) are in fact philosophically fruitless and damaging. Engel argues, on the contrary, that philosophical illumination has frequently come from speaking of one subject matter in terms of another, something he terms "isomorphism," and that such attempts "to throw light upon two ostensibly different phenomena by revealing the common logical structure of both" (p. 41) have often been quite deliberate rather than due merely to the insidious power of language to bemuse. His bold example, for this study, is Schopenhauer. Engel stresses here that, rightly or wrongly in specific cases, one of the prime (and proper) functions of philosophy is the "attempt to lead us to see similarities where our ordinary language tends to hide them from us or is as yet incapable of embracing them." (p. 48) Ryle's identification of such a function as mere linguistic mystification, therefore, is in reality a rejection of (or a failure to see) the synthesizing, unifying, creative function of philosophy itself. The history of philosophy permits us to know "quite well why thinkers like Schopenhauer speak in the very odd way they often do and what that speech means. To charge them with using misleading language is to miss the whole point." (p. 54)

The range of interests shown here is wide. There are themes from the philosophy of religion, as in Engel's essay on "Kant's 'Refutation' of the Ontological Argument" and in his treatment of the problem of evil as illuminated by "isomorphism." There are themes from ethics, as in the essay "Reason, Morals, and Philosophic Irony." And there are technical problems in the history of philosophy, such as "An Early Nietzsche Fragment on Language" (somewhat weak), and "On the 'Composition' of the Critique: A Brief Comment," or "Kant's Copernican Analogy: A Re-examination" (fascinating examples of scholarly detective work). This range makes for pleasant reading for those who enjoy the essay form on its own terms and who, in consequence, are not disappointed by absence of continuity or overall progression among the studies.

The book is well made and handsomely printed by Martinus Nijhoff.

FREDERICK FERRE

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The Visages of Adam. Ed. by H. A. Nielson, New York: Random House, 1970. Pp. 385. \$3.75.

Belief, Knowledge, and Truth. Ed. by R. R. Ammerman and M. G. Singer. New York: Charles Scribner's Sons, 1970. Pp. 532. \$4.95.

The purpose of *Visages of Adam* is to offer a selection of readings for an introductory course in Philosophical Literature or the Philosophy of Man, to present the basic points of view that are strongly in evidence today bearing upon the personal, interpersonal, and religious dimensions of human life. The criterion for selecting the readings is their relatedness to the question of how one is to regard his own existence.

A division into three parts purports to present relevant readings on how philosophers consider man: as a subject in himself, in relation to his perceptual environment, and as a creature. The theme of the anthology is that philosophical problems raised by Plato, Aristotle, Lucretius etc., find their resolution in a kind of Kierkegaardian fideism. The order of the materials, etc., is presented in a manner presupposing an unmentioned acceptance of the existential phenomenological approach to the study of man.

The first part expresses three views of man: the conditions of the individual via Socrates' defence of himself in the *Apology* and Aristotle's discussion of happiness in the *Nicomachean Ethics*; cosmological approaches to man are conveyed by Lucretius's view of death and Schopenhauer's view of the will. The Christian resolution of what the editor considers to be the problematic nature of the above views is represented by Kierkegaard's insistence that the true man is conscious of living as an individual responsible to God and by Marcel's dynamics of the human personality. The second part primarily presents the difficulties of defining a social virtue in *concreto* according to Plato together with Aristotle's views of the State and the individual as contrasted with Engel's defence of Dialectical Materialism and its moral consequences. Again, the view is that what the philosophers cannot resolve is resolved via faith represented by St. Augustine.

The third part views man as a creature via Pascal's assertion that, due to the conflicting tendencies found in man as a result of his sinfulness, man can only attain to "truth" via the grace of God, and via Kierkegaard's view that only God can truly teach because he can convey Truth and the conditions for understanding it. This is followed by Nietzsche's proclamation of the death of God and Maritain's observation that absolute atheism in a reflection of the prevalence of the practical atheism of many believers.

It is questionable whether these readings as presented adequately serve as the basis of a course in the Philosophy of Man, etc. The theme of the

book tends to absorb philosophy into theology via a kind of fideism. The insufficient introductory material leaves the student confronted with a series of conclusions of different authors but without the required knowledge of their place in the total corpus; moreover it fails to convey the nature of philosophy as a definite discipline. The failure to present the student with any Anglo-American philosophy and classical or scholastic thought on the nature of the soul is an unfortunate defect in the presentation of the views prevalent today. Finally, in choosing the anthological approach to the teaching of philosophy, is not the purpose to show what men have said about things rather than how the truth of things stands?

The editors of the anthology, *Belief, Knowledge, and Truth*, neither attempt to provide the reader with the history of what philosophers have said in regard to belief, knowledge, and truth, nor readings which could provide the basis of comparison of the various major schools of philosophy on these epistemological issues. Rather they have chosen to provide a good preamble to an intensive study of the problematic nature of defining belief, knowledge, and truth in the Anglo-American philosophical tradition. The various schools of this tradition-Analytical Philosophy, Pragmatism, and Critical Realism-are represented in this rather extensive anthology. The consideration of belief, knowledge, and truth in these schools was generated for the most part from their reaction to the context these terms were given in the empiricism of Locke and Hume and the Critiques of Kant. There is more than a topical unity to the reading because in many instances the readings are specific critical commentaries on the preceding readings.

The discussion of belief revolves around the view that belief, whether it concerns a natural belief in regard to the veracity of one's knowing powers or involves one in a religious faith, is a kind of unanalyzed knowledge which, when reflected upon and analyzed, is found to be merely opinion and not sufficient in its certitude to be called knowledge. The discussion of knowledge is permeated by the difficulty of properly defining the given in sensation in precise empirical terms and the resulting difficulty of performing an act of induction that would suffice to produce concepts marked by sufficient certitude to be called true.

In the section on truth, one is confronted with a theory that truth consists in the correspondence in identical linguistic terms of our judgment to the judgment of another or others even though the terms might have different meanings for each individual. This is contrasted primarily with the coherence notion of truth as the logical connection of the contents of experience into a systematic significant whole and the pragmatic notion of truth as the expedient way of our thinking. However, it seems to be the case that all of these theories of truth presuppose what I would term the view of truth as the intentional conformity of the mind to reality, or, more properly, the adequation of the intellect (or man's other knowing

powers) to that which is known. For, when one purports any of these other theories of truth stating that truth consists in some other relationship of the mind to its object, the proponents of these theories are in fact claiming that their theory of truth is the result of an adequation of their intellect to the real operation of the human knowing powers, etc.

Notwithstanding the above, if I have understood the intentions of the editors and what they hope to present, they seem to have adequately accomplished their goal. Nevertheless, I do believe that the presentation of a well-written introduction to each of the three segments of the book would make a significant improvement in this book as a source-book in epistemological reading from Anglo-American philosophy.

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Truth and the Historicity of Man. Proceedings of the American Catholic Philosophical Association, Volume XLIII (Washington, D.C.), 1969.

The endeavor of the 1969 convention of the American Catholic Philosophical Association, as reflected in its published proceedings, was directed toward working out an understanding of truth adequate to the requirements of contemporary thought with particular attention to religion and morals. The theme was set by W. Noris Clarke's presidential address, which proposed the challenge of "facing up to the truth about human truth" and emphasized the relevance of conceptual and linguistic frameworks in an effort to explain how truth can be characterized by both "absoluteness and relativity, permanence and mutability, universality and cultural peculiarity." Further epistemological studies were offered by Edward MacKinnon ("The Role of Conceptual and Linguistic Frameworks") and David Burrell ("Truth and Historicity: Certitude and Judgment"); the former was concerned especially with applications in the philosophy of science and theology, while the latter, stressing the objectivity-subjectivity problem, was oriented toward ethical considerations.

The other three major papers were devoted specifically to moral philosophy. Leo Ward, recipient of the Aquinas Medal from the Association, addressed himself to the problem of moral norms, particularly the love-versus-law issue raised in different ways by existentialist and situationist ethicists. James M. Gustafson's paper, "What Ought I To Do?," pointed up the factors which particularize the prudential judgment

and make for relativity in certain moral decisions; Ralph McInerny's complementary paper, "Truth in Ethics: Historicity and Natural Law," offered basically a summary of Thomistic teaching on the permanent and the flexible aspects of natural law.

In the panel discussions also the most voluminous material was devoted to ethics. The first paper, "Authority and Morals," by R. L. Cunningham, relied upon an exclusively naturalistic and functional view of authority in order to dismiss the binding force of papal teaching on moral matters, specifically contraception. Gerald Dalcourt, who some years earlier had proposed wisdom instead of prudence as the primary cardinal virtue (*International Philosophical Quarterly*, 1968), here suggested somewhat analogously that agape rather than justice should be listed as the principal moral virtue; actually his description of agape approximates what conventional Thomists would have called "justice and the allied virtues." The final paper in the ethics section, which is also the longest of all the panel discussion offerings, is John N. Deely's "Evolution and Ethics." The author argues that evolutionary thought has not reduced all ethics to relativity and that it has, in fact, served to vindicate the classical insistence on the continuity between the philosophy of nature and ethics.

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Jean-Paul Sartre: His Philosophy. By Rene Lafarge. Tr. by Marina Smyth-Kok. Notre Dame: University of Notre Dame Press, 1970. Pp. 208. \$6.50.

One more book has been added to the already densely crowded literature on Sartre. In less than 200 pages, widespaced with generous margins, Notre Dame University Press has translated Rene Lafarge's book, originally published in French two years ago. The author gives us a bird's eye view of Sartre's philosophy, covering everything from *Nausea* through the *Critique de la Raison Dialectique* with special emphasis upon *Being and Nothingness*. Since that road at that speed has been covered many times before, one cannot help wondering if the book has not come too late. In some ways this is indeed so, since much of the content has already been said, and at much greater length. However this would not do this latest excursion full justice. Lafarge, unlike some other summarizing commentators, knows his topic very well. I was impressed by the sharpness of his insights and by his great skill in showing the connection between the literary work and the purely philosophical publications. Much as we admire *Nausea*, its unstructured mode of presentation remains a

challenge. Lafarge has done an excellent job in situating *Nausea* in the general philosophy of Sartre. Indeed, the chapter on *Nausea* is in my opinion the best of the entire book.

The author is French, ostensibly writing for a French audience. He writes in that fluent prose that seems to tackle difficult problems with such facility and ease, a style that the non-French reader may even find flippant. But this is not intended by the author. It is simply the way the French write for one another. Lafarge belongs to that class of French intellectuals who, consciously or unconsciously, still believe that most of the world's culture lies within their own borders. The result, of course, is that very few non-French writers are mentioned, with the exception of Hegel, Marx and occasionally Heidegger.

I should add that Lafarge is a follower of Maritain. (Incidentally, the original French edition was published in Toulouse, where Maritain lives in semi-retirement in the house of Les Petits Freres de Charles de Foucauld.) To some this may appear to be a guarantee of orthodoxy; to others it may appear as a handicap. In the discussion on God Lafarge turns to a Thomistic approach to refute the atheistic existentialist. Whether the statement that "the contingent implies the Necessary" is cogent, however, can in my opinion be dealt with on the condition that the Necessary is distinct from the contingent. It seems to this writer that Thomism has still not faced its greatest foe, which is not so much atheism as it is pantheism. It seems futile to fight a fierce battle against atheism when a much more subtle enemy is at the door, in the form of *monism*.

No one will deny that the facts are infinitely complex. Last year in a long conversation with Sartre on the notion of God, I had the definite impression that atheism is a hard conquest and that Sartre has both won the battle and yet not won it. "Let us put it this way," said Sartre, "I am an atheist and an unbeliever. At times though, almost by distraction, I catch myself in the act of being a theist. It is as if centuries of Christianity get hold of me. But, of course, I shake this off quickly! You know, I am an atheist; *un athee et un incroyant*." Sartre, elaborating upon this theme, stated that ideas have a certain mobility, that in the restlessness of the mind they come and go but that there is nonetheless one which is predominant and habitual. This is the one which betrays the assent of the man.

All in all, Lafarge has attempted to take an objective position in his discussion of Sartre. He even concludes with the statement that we must not underestimate Sartre's eloquent plea in favor of man, his freedom and his dignity. Nothing could be more true. It has taken a while for Thomists to evaluate at their just measure the contribution of the adversary, be it Sartre or anybody else.

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Judaism and Ethics. Ed. By DANIEL SILVER. New York: KTAV Publishing House, 1970. Pp. 338. \$10.00.

This is a collection of essays originally published in the CCAR Journal, the scholarly publication of the Central Conference of American Rabbis, representative of Reformed Judaism. Excellent in literary quality and nobility of ethical sensitivity, these essays range from the abstract to the concrete, but unfortunately the abstract predominates. In the following I will mention the topics that seem to be of special interest.

Irwin M. Blank raises the question: "Is there a Common Judaeo-Christian Ethical Tradition", and concludes that after the third century there is none and that "where specific ethical responses coincide, they are coincidental." The principal reason he gives is as follows:

Judaism and Christianity are making different and irreconcilable assertions about what it is possible to know about God. Therefore, their answer to the question what if anything can man do to being good in the universe will be in disagreement. For Christians the ultimately real is already the embodiment of the god. Therefore, man can only bring some good into the universe.

For the Jew Torah expresses whatever can be known of the ultimate reality. Man can know and fulfill its requirements. Therefore, the "ought" is not to know God, which is impossible, because he is the Unique One, but to do His Torah. It must follow that where the sense of both the "ought" and the concept of the "good" do not correspond, the ethical system which flows from them will manifest this lack of correspondence. (p. 104 f.)

This is not very convincing. On the one hand, Christian theology also emphasizes the mystery of God and the fact that he is known to us through his dealings (Torah is a Covenant) with us. On the other hand, it would be an impoverishment of the Jewish tradition to ignore its mystical side, the I-Thou encounter which Buber has made known to all of us. Nor can it be sustained that the faith of the Jew is in *Someone*, while the faith of the Christian is in *something* (death and resurrection of Jesus) as Blank (relying this time on Buber) asserts. (p. 102) As the Jew believes in the God of the Exodus, so the Christian believes in the God who sent his Son to die and rise for us. In both cases our faith is first of all in God, but we know him through his acts in history.

It would seem that Rabbi Blank is too anxious to establish Jewish identity by finding some unique Jewish teaching that non-Jewish cannot accept. He bolsters his case by an excessive reliance on neo-orthodox Protestant theologians who in their eagerness to be followers of Paul have a way of minimizing the Jewish elements in the Christian tradition.

D. H. Silver, Eugene Lipman and Arthur Gilbert are on sounder grounds when they emphasize that the unique Jewish witness is not to be found in the exclusive possession of truths inaccessible to others but rather in the

vitality of a People, a living community which by its suffering, courage, restlessness, humor, and profound realism continually arouse the world to seek God in the fullness of his mystery and to carry out his will in the search for justice on earth.

I was particularly impressed by the essay of Steven S. Schwartzchild "On the Theology of Jewish Survival " for its profound faith in the destiny of this People and his repudiation of the idea that Jewish survival depends on military victories. He gives three reasons from Jewish tradition for saying that the Six-Day War should not be called a "miracle": (1) all miracles must be in accordance with the Torah and *halachah*; (2) military victories as such are never miracles; (3) many great rabbis preferred not to live in the days of the Messiah if this meant witnessing the humiliation of the Gentiles by the Jews. Would to God that Christians had always kept these three points in mind as a remedy against triumphalism!

Granted the unique witness of Israel, this volume shows plainly enough that Jews and Christians today are struggling with much the same ethical problems and modes of solution. A comparison of the essay by the Protestant theologian James A. Gustafson with the essays of Abraham Edel, Norbert Samuelson, Emil L. Fackenheim, and Richard G. Hirsch proves this convergence. Gustafson says that today two basis issues must be met by moralists: (1) How do we get some objectivity into ethics?; (2) What is the role of the community in forming values? Modern ethics, he says, tends to be:

- 1) dynamic rather than static,
- 2) open rather than closed,
- 3) a morality of love rather than law,
- 4) insistent on the liberty of the individual conscience,
- 5) future rather than past-oriented,
- 6) visceral rather than cerebral,
- 7) situational rather than universal in its norms,
- 8) conscious of God as acting in history rather than transcendent,
- 9) favoring creative responsibility rather than conformity.

It is really difficult to see anything but Christian-Jewish agreement on this problematic. We cannot even say that Judaism takes "law" against "love," since, as Jacob Neusner and Samuel Sandmel show in their essays, the translation of Torah as "Law" is misleading. **It** means the "divine design of the world" and is like the New Testament *logos*. **It** is a "way" or "wisdom" rather than a mere code. However, Sandmel in discussing the matter again falls into the trap of identifying the Gospel with St. Paul's interpretation of the Gospel (and a Lutheran Paul at that). Today it is recognized that the New Testament contains a plurality of theologies which must be balanced if we are to get the

right perspective on the Gospel. To make Paul's version an exclusive norm inevitably leads to a one-sidedness which perpetuates the division between Jews and Christians.

Not only our problematic but our methods of ethical reasoning have much in common. Norbert Samuelson, using linguistic analysis shows that we must find a middle-way between contextual (situational) ethics and Kant's ethics of autonomy. Eugene Lipman neatly summarizes the Jewish ways of making conscientious decisions: "Consulting recorded Torah maximally; I must consult the passionate, the compassionate and learned maximally; and I must pray." (p. 268) Finally, he uses "Yom Kippur" for all it is worth if the action turns out to have been a sin. (p. 269) The modern Christian follows the same path, although for him Torah includes the New Testament, and his Yom Kippur is the sacrament of penance.

Certainly, also, a Christian theologian like Harvey Cox would agree with Julian N. Hartt's view that the modern image of man in relation to God which is ethically most helpful is probably not that of man as "darling of God," "victim," "stranger," or "plastic man," but rather as "The Player" who needs to learn to "dance before the Lord." Many Christian theologians would also agree with Hans Jonas's eloquent essay in which he warns against losing the Biblical view of man as a limited creature made to praise God's wisdom in creation rather than as an exploiter and master of the world through scientific technology. However, others (including myself) would find more help in the "messianic ethics," based on the thought of the 19th-century Jewish thinker Herman Cohen, and proposed here against by Michael Meyer, which is:

1. future oriented,
2. prophetic,
3. seeking the salvation of the community, rather than just the individual,
4. envisioning a "God of the Future."

Meyer, however, wishes to find a contrast between Christianity and Judaism by arguing that Christians look for individual salvation, Jews for community salvation. Again, the Christian has to reply: "Well, I prefer to agree with *you*."

On particular concrete issues it sometimes appears that these reformed Jews are rather conservative. Thus Lou H. Silberman argues that according to Jewish tradition the marriage of a Jew to a Christian has "no validity from the standpoint of Jewish Law." (p. 198) Julius Kravetz also argues that attempts to find justification for progressivist ethical positions on abortion, conscientious objection, and the civil rights of the accused, in Jewish tradition are on shaky grounds. It is true, for example, that this

tradition does not regard abortion as murder but, nevertheless, forbids it except to save the life of the mother. (pp.274-276) On such points Jews and Christians alike are left with the problem of traditions undoubtedly encapsulating fundamental values and yet lacking credibility to "contemporary man." More clearly relevant seem Gunther Plaut's beautiful essay on the virtue of hospitality to the stranger, Solomon B. Freehof's on Jewish attitudes to death, and Samuel G. Braude's discussion of "obeying God rather than man."

It is regrettable that more essays of this latter type are not included, since they show that in Jewish ethical tradition there are many insights, forgotten or overlooked, often rich in human compassion and humorous realism, that would greatly contribute to a modern ethics that is not content with abstraction but seeks to take full account of the complexity of man's life.

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Evolving World, Converging Man. By RONERT FRANCOEUR. New York: Holt, Rinehart and Winston, 1970. Pp. 222. \$5.95.

This book is a popularization of contemporary evolutionary science and certain elements of recent theology. Its purpose is to trace the development of the interplay between the developing scientific image of the world and the emerging religious-philosophic image of man, and to present a simplified synthesis of the latest scientific views and modern religious and philosophic interpretations of man and his place in the universe. The author relies heavily on the basic philosophical and theological thought of the Jesuit priest and scientist, Pierre Teilhard de Chardin, although, for purposes of simplification and synthesis, Teilhard's ideas are reduced to schematic concepts that have lost all nuance and subtlety.

This is, then, a book for the general reader. It is not at all a scholarly work; there is no documentation, even where references would seem to be necessary-as in the case of quotations. It will be of some value, however, to the philosopher or theologian who is unfamiliar with contemporary evolutionary thinking and who wants a light, interesting, and readable essay on current ideas about evolution and what pertinence these ideas might have for Christian philosophy and theology.

The first three chapters are a broad sketch of evolutionary theory. The first chapter sets the scene with a description of how man's view

BOOK REVIEWS

of the world and his place in it has changed since the beginning of human history; the emphasis is on the importance of the evolutionary dimension of modern man's worldview. The second chapter is a broad outline presentation of evolutionary history from the origins of the universe through the Pre-Cambrian, the Paleozoic, the Mesozoic, and the Cenozoic periods up to the appearance of man. A third chapter traces man's evolution. This chapter makes use of the most recent scientific evidence and will be especially interesting for those who are not professional anthropologists.

Chapters four and five are an attempt to synthesize the evolutionary ideas of the first three chapters with contemporary Christian philosophy and theology. Chapter four is a summary of much theological re-thinking of the doctrine of creation in terms of an evolutionary framework. It depends largely on the theologies of Eulalio Baltazar, Karl Rahner, and Langdon Gilkey, as well as Teilhard de Chardin and others. The theology is very superficial, and, for that reason, not fairly reflective of the ideas drawn from several of the theologians who are referred to. But it is an interesting attempt at synthesis. The fifth chapter is less successful. Basically, the author tries to use recent theology of death and of original sin to explain the negative side of human reality in a way that is consistent with both science and Catholic doctrine. It is Catholic doctrine that suffers. Even a superficial treatment of this kind cannot afford to overlook the essential data of the Church's teaching on original sin. Further, the author shows no real understanding of, or even familiarity with, Catholic theology of original sin since the Council. Like the fourth chapter, this one depends to a great extent on Teilhard de Chardin's thought; but Teilhard's ideas, sketchy enough in Teilhard's own essays, are reduced here to caricature. No matter how simple and popular the writing, there has to be more to say about original sin than that it is the negative aspect of the human condition. The chief weakness of both these chapters is that they do not take the work of theologians-men like Piet Schoonenberg, Karl Rahner, and Ansfried Hulsboch, who have dealt with these problems at length and in depth-with sufficient seriousness. This is, then, "pop" theology at its poorest.

A concluding chapter looks ahead to man's future and to the possibilities for his future evolution. The descriptions of contemporary scientific advances and the directions they indicate are provocative and not without interest. The book ends with a sixteen-page selected annotated bibliography which could be useful, particularly to teachers of philosophy and theology.

Readers of Francoeur's earlier *Perspectives in Evolution* (Baltimore: Helicon, 1965) are advised that the book at present being reviewed and which covers exactly the same material is, by comparison, somewhat shallow. The explanations are even more simplified than in *Perspec-*

tives, there is almost no scholarly apparatus, and the theology shows very little progress. On the other hand, the present book is more up-to-date scientifically.

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Understanding Genesis. By NAHUM M. SARNA. New York: Schocken Books, 1970. Pp. 267. \$2.45.

The Bible as Literature. By T. H. HENN. New York: Oxford University Press, 1970. Pp. 270. \$7.00.

The first of these books appeared four years ago as Vol. I of the Melton Research Center series of the Jewish Theological Seminary of America. Happily, it has been republished as a Schocken paperback. Nahum Sarna is a qualified biblical scholar and his approach—though eschewed by most orthodox Jews—includes the modern scientific perspective. However, his Jewish bias is immediately manifested in the Introduction, where he designates Benedict Spinoza as the founder of the scientific approach to the Bible.

Sarna is at home with the principal pagan creation myths. He uses his knowledge to good effect in contrasting the Babylonian Enuma Elish story with the Genesis account to illustrate that in the latter "There is no connection between the Creator and his handiwork." (pp. 10-11) The "second" account of creation is employed to show the anti-fertility bias of the Old Testament. The Christian reader looks in vain for a treatment of Gen. 5:15; here the typically Jewish optimism regarding human nature surfaces. Mankind needs no redemption from sin because Adam and Eve's disobedience did not constitute a "Fall." The Gilgamesh epic is adroitly handled in the treatment of the Flood and the Tower of Babel. Chapter 4 contains interesting insights on biblical chronology in the lives of the patriarchs. A whole chapter (6) is devoted to Gen. 14, where Melchizedek is treated as a proper name and is referred to Ps. 110! Sarna's explanation on p. 117, however, is a bit simplistic.

Chapter 9 on the binding of Isaac is excellent. Rejecting the theory that the story represents God's rejection of child sacrifice as a primary theme, the author insists that its main significance is to illustrate Abraham's growth in the spiritual life: he has passed the supreme test on his willingness to kill Isaac. Four more brief chapters bring the book to an end. The Onan incident is not mentioned, nor are the blessings of Jacob on his twelve sons treated. Perhaps the most telling omission, however,

is Sarna's neglect of source criticism, which he employs very sparingly. Although admitting the "non-unitary origin of the Pentateuch" on p. xxiv, he obviously has mixed feelings regarding the validity of the documentary theory. This book has a wealth of positive insights amply justifying the paperback reprint.

The Bible as Literature is the work of a noted poet and literary critic, Professor T. R. Henn, President of St. Catherine's College, Cambridge. Understandably, the book deals largely with the Old Testament: the Hebrew Scriptures present a greater variety of literary types, and (perhaps) the author feels more at home in this area. A wide spectrum of topics is treated: biblical themes, languages, poetic forms, the problem of evil, the Holy War, together with analyses of a few individual books.

To review a work such as this (much less to write it) demands expertise in two fields: English literature and biblical exegesis. This reviewer pleads something less than competency in the former field; however, a few observations may be in order. After giving his reasons for opting in favor of the King James Version, Henn then all but demonstrates on pp. 41-44 that it is "now so obsolete as to demand wholesale revision." He refers to "Rahner" on p. 20; one must consult the index to learn that the author is referring to Hugo rather than Karl. Literary allusions abound throughout the text; it is almost anti-climactic to find a chapter (14) expressly devoted "to invite attention to some of the many ways in which English writers have made use of the Bible. . . ."

When Henn ventures into the area of exegesis he comes up with some interesting insights. Certain of his conclusions, predictably, leave something to be desired. In his analysis of Job (in which he uses lengthy citations from one of his favorite poets, Blake) Henn overlooks the ultimately redeeming value of suffering it teaches: the intimacy with God which adversity is capable of affording the sufferer. The author's defense of the Holy War on p. 218 is a bit superficial; Nahum Sarna gives a more profound and biblical reason in his book: Israel had been designated as God's rod to chastise the Canaanites for their gross sins (cf. Lev. 18:24-25; I>eut. 9:4-6).

There is an urgent need today to supplement form criticism with traditional, extra-biblical literary criticism in our approach to Scripture. This book may be a solution. However, it seems to this reviewer that a more direct, comprehensive coverage of the whole Bible is required.

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BOOKS RECEIVED

- George Braziller: *The Pragmatic Movement in American Philosophy*, by Charles Morris. (Pp. 221, \$6.50); *Agony & Epitaph*, by Albert Hofstadter. (Pp. 283, \$7.50).
- Bruce Publishing Co.: *Sex: The Radical View of a Catholic Theologian*, by Michael F. Valente. (Pp. 158, \$2.95).
- The Catholic University of America Press: *Ancients and Moderns. Studies in Philosophy and the History of Philosophy*. Vol. 5, ed. by John K. Ryan. (Pp. 368, \$12.95).
- Columbia University Press: *Hellenistic Ways of Deliverance and the Making of the Christian Synthesis*, by John Herman Randall, Jr. (Pp. 251, \$7.95).
- Harper & Row: *Was Jesus Married?* by William E. Phipps. (Pp. 289, \$5.95).
- Harvard University Press: *The French Institutionalists. Maurice Hau-riou, Georges Renard, Joseph T. Delos*, ed. by Albert Broderick. (Pp. 395, \$15.00).
- Holt, Rinehart, & Winston: *Evolving World, Converging Man*, by Robert Francoeur. (Pp. 233, \$5.95).
- Inter-Varsity Press: *The Living God. A Personal Look at What the Bible Says about God*, by R. T. France. (Pp. 128, \$1.50).
- Martinus Nijhoff: *Einstein and Aquinas: A Rapprochement*, by John F. Kiley. (Up. 164, guilders 20.70).
- Organización de los Estados Americanos: *Los "Fundadores" en la Fila-sofia de America Latina*. Bibliografías Básicas, VII. (Pp. 208).
- Oxford University Press: *Concordant Discord. The Interdependence of Faiths*, by R. C. Zaehner. (Pp. 464, \$15.00).
- Royal Vangorcum Ltd.: *Being, Nothing and God. A Philosophy of Appearance*, by George J. Seidel. (Pp. liS Hfl. 16).
- Shocken Books: *Theism and Empiricism*, by A. Boyce Gibson. (Pp. 280, \$8.00).
- University of Dallas Press: *The Paradoxical Structure of Existence*, by Frederick D. Wilhelmsen. (Pp. 175).
- University of Notre Dame Press: *A New Chapter for Monasticism*, by John Moffit. (Pp. 350, \$12.00).
- The Westminster Press: *God, Why Did You Do That?* by Frederick Sontag. (Pp. 172, \$2.65).